NAVAL FACILITIES ENGINEERING COMMAND
200 Stovall Street
Alexandria, Virginia 22332-2300

NOTICE OF INACTIVE FOR NEW DESIGN

DM 33.03
NOTICE 1
1 May 1996

MEDICAL CLINICS / DENTAL CLINICS

Design and Construction Criteria

Design Manual 33.03, dated January 1987, is inactive for new design and shall no longer be used as guidance reference for new design.

New designs should use MIL-HDBK-1191 Medical and Dental Treatment Facilities Design and Construction Criteria. CAUTION: The supersession information is valid as of the date of this notice and may be superseded by subsequent revisions of the superseding document.

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DESIGN MANUAL 33.03
JANUARY 1987

Design Manual 33.03
January 1987
Notice 1
1 May 1996
CCB #37 Third Quarter 1996

CCB Application Notes:

1. Character(s) preceded & followed by these symbols (À Ù) or (Ú ¿) are super- or subscripted, respectively.
   EXAMPLES: 42mÀ3Ù = 42 cubic meters
   COÚ2¿ = carbon dioxide

2. All degree symbols have been replaced with the word deg.

3. All plus or minus symbols have been replaced with the symbol +/-.

4. All table note letters and numbers have been enclosed in square brackets in both the table and below the table.

5. Whenever possible, mathematical symbols have been replaced with their proper name and enclosed in square brackets.

Naval Facilities Engineering Command
200 Stovall Street
Alexandria, Virginia 22332-2300

Medical Clinics
Dental Clinics

Design & Construction Criteria

DESIGN MANUAL 33.03

JANUARY 1987

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ABSTRACT

Design criteria are presented on facilities covered by category class 500 for use by experienced architects and engineers. The contents include design and construction criteria for Naval Medical Clinics and Dental Clinics.

FOREWORD

This design manual is one of a series developed from an evaluation of facilities in the shore establishment, from surveys of the availability of new materials and construction methods, and from selection of the best design practices of the Naval Facilities Engineering Command, other Government agencies, and the private sector. This manual uses, to the maximum extent feasible, national professional society, association, and institute standards in accordance with NAVFACENGCOM policy. Deviations from these criteria should not be made without prior approval of NAVFACENGCOM Headquarters (Code 04).

Design cannot remain static any more than can the naval functions it serves or the technologies it uses. Accordingly, recommendations for improvement are encouraged from within the Navy and from the private sector and should be furnished to Naval Facilities Engineering Command, Code 04T7, 200 Stovall Street, Alexandria, VA 22332-2300.

This publication is certified as an official publication of the Naval Facilities Engineering Command and has been reviewed and approved in accordance with the SECNAVINST 5600.16.

J. P. JONES, JR.
Rear Admiral, CEC, U.S. Navy
Commander
Naval Facilities Engineering Command

MEDICAL FACILITIES DESIGN MANUALS

DM Number	Chapter Superseded in Basic DM	Title
33.01	1, 2, 3, 4	Medical Facilities Preliminary Design Considerations
33.02	5	Naval Hospitals - Design and Construction Criteria
33.03	--	Medical Clinics and Dental Clinics - Design and Construction Criteria

NAVAL MEDICAL CLINICS AND DENTAL CLINICS
DESIGN AND CONSTRUCTION CRITERIA

CONTENTS

Section 1: INTRODUCTION

1.1 Scope. This manual presents criteria to design well-coordinated, cost effective, energy-efficient, safe, flexible, expandable, and low maintenance facilities, for Navy Medical Clinics and Dental Clinics worldwide.

1.2 Cancellation. This manual cancels and supersedes NAVFAC DM-33.03, Naval Medical Clinics and Dental Clinics, Design and Construction Criteria of March 1983.

1.3 Related Criteria. Additional criteria related to medical facility design and construction is included in the following sources:

NAVFAC DM-33.01	Medical Facilities Preliminary Design Considerations
NAVFAC DM-33.02	Hospitals, Design and Construction Criteria

Section 2: BASIC DESIGN CONSIDERATIONS

2.1 Scope. This section provides an overview of the unique considerations to the design and construction of Navy Medical and Dental Clinics. The objectives are to design and construct medical clinics which are energy-efficient, safe, efficient to operate and maintain, and logically planned to allow convenient economical renovation or expansion. Brief discussions of each of these objectives follow.

2.2 Flexibility/Expandibility. Medical and dental clinics must be planned, designed and constructed to permit expansion and physical change during the life of the facility

2.2.1 Modular Concept. A 2 feet by 2 feet (600mm by 600mm) planning grid system shall be used to develop the partition system, the ceiling system, and the lighting layout. Ceiling shall be continuous within limits of smoke and fire walls. The ceiling grid shall be adhered to as closely as possible for layout, particularly in areas with highly repetitive rooms in medical clinics.

2.2.2 Horizontal Expansion. The exterior walls must be designed to permit penetration or removal of the wall during expansion or renovation. Corridors and stairs should be planned for the future growth of the primary inter-departmental circulation system and the secondary circulation systems within each department.

2.2.3 Structural system. The structural system should be designed to permit the expansion identified during the planning of the project. The structural system should be designed to facilitate relocation of walls, ceilings, secondary electrical wiring, and secondary plumbing systems with minimum structural impact. In radiology, flexibility should be considered in planning for suspended or ceiling mounted medical equipment. Shear walls must be carefully placed to permit flexibility.

2.2.4 Heating, Ventilating, and Air Conditioning. The heating, ventilating, and air conditioning systems must be designed to permit easy relocation of functions within the facility.

2.2.5 Plumbing and Piping. All plumbing systems shall be designed and installed to permit removal and/or relocation with a minimum amount of structural alterations to the facility. All systems, with exception of soil, waste and vent, shall be designed with zone control valves to permit future changes without shutting off major portions of the system. All pressure piping systems shall be installed overhead in easily accessible locations feeding down to point of use.

2.2.6 Electrical. The electrical system should permit incremental change as functions change. All electrical and communications services shall be run overhead in easily accessible locations feeding down to points of use.

2.3 Energy Conservation.

2.3.1 Architectural. Building orientation, massing, shading, and materials are basic energy conservation considerations. Shading devices should be studied to shade south facing glazing during appropriate seasons.

2.3.2 HVAC Systems. Within budget constraints the HVAC systems equipment and controls shall consume the lease energy possible without jeopardizing performance. Use of energy recovery systems, economizer cycles, alternate energy sources and HVAC system shutdown during unoccupied hours, should be considered if economically justified.

2.3.3 Plumbing Systems. Energy conserving design of plumbing systems should consider use of recovered heat to preheat domestic water, solar domestic hot water, and water conservation.

2.3.4 Lighting. Lighting levels for every programmed space should be in accordance with Appendix A. The specified levels are for general lighting and considered maximum, and should not be exceeded.

2.3.4.1 Natural Lighting. Strategically located natural lighting should be optimized wherever possible for general illumination. The use of natural lighting must be consistent with the overall energy conservation plan.

2.3.4.2 Task Lighting. Task lighting shall be used to improve the flexibility and management of illumination and energy requirements.

2.4 Fire protection. Medical and dental clinics shall be designed in accordance with MIL-HDBK-1008. Medical and dental clinics shall have 100 percent automatic fire extinguishing systems, which protects occupants and property, and complements the flexibility and expandibility concepts.

Section 3: SITE PLANNING AND CIVIL ENGINEERING

3.1 Scope and Related Criteria.

3.1.1 Scope. This section provides criteria for building orientation, site circulation, parking, planning future expansions and utilities which tends to maximize functionality of the facility at minimum cost.

3.1.2 Related Criteria. The following is a list of mandatory design criteria on site planning, civil engineering, and landscape design which should be reviewed in conjunction with this section.

DM-1.03	Architectural Acoustics.
DM-1.04	Earth Sheltered Facilities.
DM-3.08	Exterior Distribution of Utility Steam, High Temperature Water (HTW), Chilled Water (CW), Fuel Gas and Compressed Air.
DM-4.01	Electrical Engineering, Preliminary Design Considerations.
DM-4.02	Electrical Engineering, Power Distribution Systems.
DM-5.03	Civil Engineering, Hydrology.
DM-5.03	Civil Engineering, Drainage Systems.
DM-5.04	Civil Engineering, Pavements.
DM-5.05	General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Areas.
DM-5.07	Civil Engineering, Water Supply Systems.
MIL-HDBK-1008	Military Handbook, Fire Protection for Facilities Engineering, Design, and Construction.

3.2 Site Planning.

3.2.1 Preservation of Site Amenities. Federal Regulations require protection and enhancement of the quality of the environment. The site shall be planned to respect existing natural and historic elements of the site.

3.2.1.1 Natural Water and Land Formations. Natural land formations shall be used with minimum grading to provide a completed facility compatible with the surrounding natural environment. Environmentally sensitive land formations, such as natural surface water formation and natural drainage courses, shall be preserved and protected during construction.

3.2.1.2 Existing Site Vegetation. Medical and dental clinics should be sited to preserve the natural vegetation indigenous to the site. To the greatest extent possible, the existing vegetation shall be preserved during construction and used to enhance the character of the interior and exterior environment.

3.2.1.3 Site Grading. The existing site character, topography and drainage patterns shall be respected when planning the site grading. A balanced cut and fill for the entire site shall be achieved to eliminate the need for hauling soil or or off site. Excess fill may be used for earth berms to blend the existing topography and to partially screen surface and parking areas.

3.2.1.4 Site Storm Drainage. Storm drainage should be designed to preserve the existing drainage pattern as nearly as practicable. Pre-development discharge rates should be achieved by use of retention if necessary.

3.3 Civil Engineering.

3.3.1 Parking. The location of the parking area(s) shall be designed with clarity and shall relate to main building entrances. The number of general purpose parking spaces shall be determined as follows:

- 59% of medical staff during peak shift
- 19% of average daily outpatient load during peak month
- 2 parking spaces per Dental Treatment Room

Parking spaces shall be distributed in proportion to the expected use near outpatient and emergency portals. Separate lots shall not be provided for staff parking. Parking lots shall be designed in accordance with NAVFAC definitive drawing 1294412. Handicapped parking spaces shall be provided as follows: 4% of first 100 spaces, 2% of next 100 spaces, and 1% of spaces in excess of 200 cars. At least two accessible parking spaces shall be provided at both the main outpatient entrance and emergency entrance. In no case shall the handicapped person be required to cross a roadway for access from the parking space to the building.

3.3.2 Paving Materials. Concrete shall be used at receiving entrances, loading areas, dumpster pads, and motorcycle parking areas. Roadway paving structure (sections) should conform to American Association of State Highway and Transportation Officials (AASHTO) H-16 Loading Classification. Parking lot paving structure (sections) shall conform to AASHTO H-10 Loading Classification.

3.3.3 Curbs and Gutters. Curbs and gutters shall be utilized where roadway and parking slopes approach maximum slope criteria to ensure positive control of drainage. Curbs and gutters shall not be utilized for medians in parking lots in climates with snowfall to facilitate its removal.

3.3.4 Wheelstops. Projecting "wheelstops" shall not be utilized in parking areas. They are high maintenance fixtures and when not maintained can be hazardous to personal property.

3.3.5 Snow Removal. Design of roadways and parking lots in climates with significant snowfall shall provide for piling and/or contiguous storage of plowed snow. A minimum 4 feet (1200 mm) wide stabilized shoulder shall be provided for all roadways.

3.3.6 Utility Planning. Within the project boundary, all utilities should be located underground and be metered at the building. Underground utilities shall be coordinated with the alignment of paving, roads, and landscape to avoid conflicts with site elements. Location of utilities shall be coordinated with future expansion requirements and should not be routed through the area identified for future expansion.

3.3.7 Noise/Vibration. Site planning should consider existing noise level on site from vehicular traffic, aircraft takeoff/landing traffic, industrial noise, munitions and armament testing or exercises, etc. Natural features of a specific site which have acoustical shielding qualities, e.g., trees, changes in topography, orientation etc., should be utilized to minimize objectional noise and vibration. Noise and vibration control shall be in accordance with NAVFAC DM-1.03.

3.4 Site Flexibility/Expandability.

3.4.1 Facility Expansion. The design should allow for future expansion of each functional zone as shown on Table 1.

TABLE 1
Potential Growth

Zones	Expansion Potential
Medical Clinics	40%
Administrative	25%
Support	25%

3.4.2 Site Circulation. Site circulation should be designed for projected expansion without major disruption. Roads should be designed with clearances to permit lane expansion without relocation of utilities or major landscaping features.

3.4.3 Parking. The site should be planned to permit future expansion of parking by 25 percent. Future parking requirements are not to be used to justify parking structures for current projects.

Section 4: ARCHITECTURE

4.1 Scope and Related Criteria.

4.1.1 Scope. The purpose of this section is to provide architectural criteria for the design of Navy Medical and Dental Clinics.

4.1.2 Related Criteria. The following is a list of mandatory design criteria on architecture which should be reviewed in conjunction with this section.

NAVFAC DM-1.02	Materials and Building Components
NAVFAC DM-1.03	Architectural Acoustics
NAVFAC DM-1.04	Earth Sheltered Facilities

4.2 Architectural Design.

4.2.1 Materials. Selection of materials shall be based on appropriateness, availability, economy, and appearance. Economy is based on initial cost and maintenance cost. Interior finishes shall be in accordance with Appendix A.

4.2.2 Exterior Envelope. The exterior walls, windows and roof should be designed with the appropriate penetration for glazing and with the appropriate "U" value for the climate. Double glazing shall be provided for all exterior glazed areas. The "U" value for roof and wall assemblies should be analyzed with respect to the overall energy budget. The "U" value must not be more than the values indicated in Table 2. Vestibules and/or windshields shall be provided at all major entries.

TABLE 2
U-Values BTU/(hr)(sq ft)(F)

Gross Wall	WALL	ROOF	FLOOR	FLOOR SLAB on GRADE
Heating Degree Days				
Less than 1000 0.38	0.15	0.05	0.10	0.29
1000-2000 0.38	0.15	0.05	0.08	0.24
2001-3000 0.36	0.10	0.04	0.07	0.21
3001-4000 0.36	0.10	0.03	0.07	0.18
4001-6000 0.31	0.08	0.03	0.05	0.14
6001-8000 0.28	0.07	0.03	0.05	0.12
Over 8000 0.28	0.07	0.03	0.05	0.10
Degree-Days values from NAVFAC P-89 shall be used.				

4.2.3 Interior Partitions. Interior partitions shall be designed to support minimum vertical loads of 100 lbs per linear foot (1.5 kg/mm) applied 6 inches (150 mm) from face of the partition. Partitions at all door jambs shall be reinforced with subframes, double framing, or "solid slushing" to provide resistance to stresses and impact of doors over 3 feet wide (900 mm). Partition runs should not exceed 18 feet (5400 mm) without cross partitions, corners, pilasters, or rigid bracing.

4.2.4 Ceiling Grid. A 2 feet by 2 feet (600 mm by 600 mm) planning grid system shall be used to develop the partition system, the ceiling system, and lighting layout. Ceiling shall be continuous within limits of smoke and fire walls. The ceiling grid shall be adhered to as closely as possible for layout, particularly in areas with highly repetitive rooms in medical clinics.

4.3 Flexibility and Expandability.

4.3.1 Departmental Expansion. The facility shall be planned for logical growth in each of the functional zones. The corridor system shall be planned to permit expansion without major disruption of the existing functions.

4.3.2 Exterior Walls. Exterior walls shall be non-load bearing to afford the greatest potential for horizontal expansion.

4.3.3 Radiology planning. A federal standard X-ray room design which provides a T-trench, a 10 feet (3000 mm) high ceiling, a universal overhead tubehead support system, and standard utilities shall be used.

4.3.4 Laboratory Planning. A moveable modular casework system shall be used in all areas of the laboratory. Utilities shall be planned for the laboratory to serve the casework system at all points. A 6 feet (1800 mm) by 6 feet (1800 mm) ceiling grid of electrical outlets and water outlets shall be provided in the ceiling of the laboratory. Cut-off valves shall be provided at appropriate locations to permit relocation without shutting off the entire utility system.

4.4 Handicapped Accessibility. All medical facilities shall be accessible where accessible is defined as compliance with the Uniform Federal Accessibility Standards published in the Federal Register on 7 August 1984 (49 FR 31528).

4.4.1 Corridors. The width of corridors shall be a minimum of 8 feet (2400 mm) clear width for the emergency clinic and the radiology department and 5 feet 6 inches (1650 mm) clear width for outpatient occupancy. Ramps should be avoided.

4.4.2 Toilets. Public toilet facilities designed for wheel chair access shall be provided within a travel distance not to exceed 150 feet (45 000 mm), at least at the main outpatient entrance and the emergency entrance, and not less than one per floor.

4.4.3 Public Telephones. At least one accessible public telephone shall be located at the outpatient main entrance, and the emergency entrance.

4.4.4 Drinking Fountains. An accessible drinking fountain or water cooler shall be provided within a travel distance not to exceed 150 feet (45 000 mm). The drinking fountain most adjacent to accessible toilet rooms should be designed accessible.

4.5 Security.

4.5.1 Portal Controls. Entrance to the facility shall be limited to three types of portals: the outpatient portals, the emergency portals, and the supply portals. Each portal shall be under the visual surveillance of an employee designated to control the public areas surrounding the portal area. When the surveillance is not provided, the portal entries shall be locked. All other entries and exits to the facility required for life safety shall be locked from the outside and provided with an alarm system and appropriate signage indicating that the alarm will sound if the emergency exit is used.

4.5.2 Key System. All doors to corridors from rooms shall have locksets. The key and lock system shall be based on several levels of master keys. Masters shall be provided for departments. Grand masters and great grand masters shall be provided for functional zones and modules.

4.5.3 Physical Security Protection and Detection. Table 3 indicates the minimum security provisions for protection and detection for the areas listed.

TABLE 3
Protection and Detection Systems

Department/Area	Security Provisions[*]
Pharmacy	1, 2, 3, 4, 5, 6, 7, 8
Radiology Silver Recovery	3, 4, 5
Bulk Storage Rooms	3, 4, 5
Medical Records	1, 4

[*] Security Provisions are described in the following subparagraphs.

4.5.3.1 (1) Roll-Up Shutters. Roll-up lockable shutters bearing Underwriters' Laboratories' labels for a 1-hour rating shall be provided at each issue window.

4.5.3.2 (2) Walls. All bulk controlled substance drug storage vault side walls shall be equivalent to brick or masonry construction.

4.5.3.3 (3) Doors and Locks. Doors shall be either solid core wood or hollow steel construction, 1-3/4 inch (45 mm) thick. Dutch or half doors are unacceptable. Doors shall have nonremovable pins. Doors set in steel frames must be fitted with a mortise lock with a deadlocking feature. The lock must be automatically deadlocking on door closure, requiring re-entry to the room with key or lock combination and allowing egress from the room by turning the inside knob.

4.5.3.4 (4) Other Room Access. Ceiling overhead areas which enable entry into a secure room from an unsecured room shall be barricaded by the installation of a suitable partition or ceiling which deters "up and over" access.

4.5.3.5 (5) Intrusion Detectors. An intrusion detection alarm system detects entry into the room and broadcasts a local alarm of sufficient volume to induce an illegal entrant to abandon a burglary attempt. Intrusion detectors shall have: (1) An internal automatic charging DC standby power supply with primary AC power operation, (2) A remote, key operated activation/deactivation switch installed outside the rooms and adjacent to the room entrance door frame, (3) A local alarm level of 80 dB (min) to 100 dB (max) up to 100 feet (30 000 mm) from the protected room, (4) An integral capability for the attachment of wiring for remote alarm and intrusion indicator equipment (visual or audio).

4.5.3.6 (6) Service Window. Service window shall be constructed of laminated safety glass.

4.5.3.1 (7) Special Key Control. Room door lock keys and day lock combinations, where applicable, are special keys and shall not be mastered.

4.5.3.8 (8) Safes and Vaults. Drugs classified as schedule I or II controlled substances under the Controlled Substance Act of 1970 must be stored in safes or vaults which conform to the following specifications:

4.5.3.8.1 Safes. Safes must weigh no less than 750 pounds (340 kg), have a vault wall at least 1/2 inch (13 mm) thick with either a door of 3-1/2 inch (90 mm) steel or 1-1/2 inch (40 mm) solid cast manganese steel with 6 inch (150 mm) return flanges plus 1-1/2 inch (40 mm) of plate steel.

4.5.3.8.2 Vaults. Where bulk quantities or controlled substance handling requirements deem that safes may be impractical, vaults shall be used. Only Type II vaults shall be provided. A Type II vault shall be constructed of walls, floors, and ceilings of a minimum of 8 inch (200 mm) reinforced concrete or other substantial masonry, reinforced vertically and horizontally with No. 4 (13 mm) steel rods tied 6 inch (150 mm) on center. Doors shall meet Federal Specification AA-D-600B class 5 criteria. In addition, a day gate shall be provided.

4.6 Shielding.

4.6.1 Acoustical and Vibration Shielding. Sound transmission limitations shall adhere to Table 4. Objectionable noise and vibration emanating from vacuum pumps for housekeeping systems or pneumatic tube systems shall be pad mounted with vibration isolation from the structure. All piping and duct connections shall include flexible connections to prime equipment.

4.6.2 Radiation Shielding. Design of radiation shielding shall conform to the requirements and criteria published in the current edition of Report Nos. 34 and 49 of the National Council on Radiation Protection (NCRP).

TABLE 4
Sound Transmission Limitations

	Airborne Sound Transmissions Class (STC)[a]		Impact Insulation, Class (IIC)[b]
	Partitions	Floors	Floors
Examination room to adjacent spaces	45	45	45
Doctors offices to adjacent spaces	45	45	45
Treatment spaces/areas to adjacent spaces/areas	45	45	45
Duty rooms to adjacent spaces	45	45	45
Toilet/Bath room to adjacent spaces	45	45	45
Conference rooms to adjacent spaces	45	45	45
Computer Data Processing rooms to adjacent spaces	50	50	50
Mechanical rooms to adjacent non-mechanical spaces	55	55	55

[a] Sound transmission class (STC) shall be determined by tests in accordance with methods set forth in ASTM Standard E90 and ASTM Standard E413.
[b] Impact insulation class (IIC) shall be determined in accordance with criteria set forth in HUD FT/TS-24, "A Guide to Airborne, Impact and Structure Borne Noise Control in Multi-Family Dwellings."

Section 5: STRUCTURAL ENGINEERING

5.1 Scope and Related Criteria.

5.1.1 Scope. The purpose of this section is to provide structural criteria for the design of Navy Medical Clinics and Dental Clinics.

5.1.2 Related Criteria. The following is a list of mandatory design criteria on structural engineering which should be reviewed in conjunction with this section.

NAVFAC DM-2.01	Structural Engineering, General Requirements
NAVFAC DM-2.02	Structural Engineering, Loads
NAVFAC DM-2.03	Structural Engineering, Steel Structures
NAVFAC DM-2.04	Structural Engineering, Concrete Structures
NAVFAC DM-2.09	Masonry Structural Design For Buildings

5.2 Structural Engineering.

5.2.1 Structural Bay Sizes. The structural bay size and structural system shall complement the 2 feet by 2 feet (600 mm by 600 mm) grid system and the building module size. Structural bay sizes of 18 feet by 30 feet (5400 mm by 9000 mm) and 30 feet by 30 feet (9000 mm by 9000 mm) are recommended for evaluation.

5.2.2 Design Live Loads. Live loads will be provided for each programmed area in accordance with Appendix A and NAVFAC DM-2.02.

5.2.3 Design Dead Loads. Dead loads shall in accordance with NAVFAC DM-2.02.

5.2.4 Seismic Engineering. The minimum level of earthquake resistance shall be that provided by construction in accordance with NAVFAC P-355. The minimum importance factor for medical and dental clinics shall be I=1.25.

5.2.5 Expansion and Control Joints. Expansion joints shall be provided for each 200 feet (60 000 mm) of structure, slabs on-grade, or paving. Control joints or "planes of weakness" shall be provided 20 feet (6000 mm) on centers in concrete paving and slabs on-grade.

5.2.6 Concrete Slabs on Grade. Control joints shall be provided in concrete slabs on grade to isolate columns from slabs. Expansion joints shall be provided in exposed masonry work every 100 feet (30 000 mm).

5.2.7 Finished Concrete. All exposed finished concrete floors shall be "hardened."

5.2.8 Floor Slabs Slope. Floor slabs with floor drains shall be designed with a minimum slope of 3/8 inch per foot (3 percent) to drains.

Section 6: HVAC ENGINEERING

6.1 Scope and Related Criteria.

6.1.1 Scope. The purpose of this section is to provide heating, ventilating, and air-conditioning criteria for the design of Navy Medical and Dental Clinics.

6.1.2 Related Criteria. The following is a list of mandatory design criteria on heating, ventilating, and air-conditioning engineering which should be reviewed in conjunction with this section.

NAVFAC DM-3.03	Heating, Ventilating, Air Conditioning, and Dehumidifying Systems
NAVFAC DM-3.06	Central Heating Plants
NAVFAC DM-3.08	Exterior Distribution of Utility Steam, High Temperature Water (HTW), Chilled Water (CW), Fuel Gas and Compressed Air
NAVFAC DM-3.10	Noise and Vibration Control of Mechanical Equipment
NAVFAC DM-3.16	Thermal Storage Systems

6.2 HVAC Engineering.

6.2.1 Indoor Design Conditions. HVAC engineering design criteria for individual rooms shall be in accordance with Appendix A.

6.2.1.1 Minimum Air Changes. The minimum air changes indicated in Appendix A shall be required for all areas.

6.2.1.2 Minimum Outside Air. The minimum outside air requirement indicated in Appendix A is the minimum outside air changes per hour required to meet ventilation requirements at design conditions.

6.2.1.3 Outside Exhaust Requirements. Where outside exhaust is required by Appendix A, 100 percent of the supply air shall be exhausted directly to the outside.

6.2.1.4 Temperature. Summer design temperatures should be used for winter conditions except when a room is located on an exterior wall or has a roof directly overhead.

6.2.2 Outdoor Design Criteria. NAVFAC P-89, Engineering Weather Data, shall be used to determine the outdoor design conditions. For locations not shown in NAVFAC P-89, the design conditions may be obtained from the Naval Facilities Engineering Command through the Engineering Field Division.

6.2.3 System Selection. Terminal reheat, variable air volume, or multizone HVAC systems shall be designed for medical and dental clinics. Variable air volume systems, if selected, shall use industrial grade controls.

6.3 Energy Conservation.

6.3.1 Energy Budget. The energy budget for medical clinics shall be based on weather zones as shown on Table 5. The energy budget for dental clinics shall be based on weather zones as shown on Table 6. For purposes of calculating energy budgets, the conversion factors shown on Table 7 shall be used.

TABLE 5
Medical Clinic Energy Budgets

Zone	Heating Degree Days	Cooling Degree Days	Btu/SF/Year	(kJ/mÀ2Ù/year)
National --		-	55,000	(625 000)
Zone 1	more than 7000	less than 2000	70,000	(795 000)
Zone 2	5500-7000	less than 2000	70,000	(795 000)
Zone 3	4000-5500	less than 2000	55,000	(625 000)
Zone 4	2000-4000	less than 2000	50,000	(568 000)
Zone 5	0-2000	less than 2000	40,000	(455 000)
Zone 6	0-2000	more than 2000	45,000	(510 000)
Zone 7	2000-4000	more than 2000	60,000	(682 000)

TABLE 6
Dental Clinic Energy Budgets

Zone	Heating Degree Days	Cooling Degree Days	Btu/SF/Year	(kJ/mÀ2Ù/year)
National --		-	60,000	(628 000)
Zone 1	more than 7000	Less than 2000	75,000	(852 000)
Zone 2	5500-7000	less than 2000	75,000	(852 000)
Zone 3	4000-5500	less than 2000	60,000	(682 000)
Zone 4	2000-4000	less than 2000	55,000	(625 000)
Zone 5	0-2000	less than 2000	45,000	(510 000)
Zone 6	0-2000	more than 2000	50,000	(568 000)
Zone 7	2000-4000	more than 2000	65,000	(739 000)

TABLE 7
Energy Budget Conversion Factors

Source	Factor
Electricity	3,413 Btu (3.600 000 J) per kWh
Fuel Oil	138,700 Btu (1.46x10À8Ù J) per gallon
Natural Gas	1,030,000 Btu (1.09x10À9Ù J) per thousand cubic feet.

6.3.2 Energy Recovery. Energy recovery devices should be considered to recover energy from exhaust air from ducts exhausting 10,000 CFM or more. Filters shall be provided in intake air and exhaust air ducts before the ducts connect to heat recovery wheels.

6.3.3 Economizer Cycles. Economizer cycles shall be used when cost effective.

6.3.4 HVAC Shutdown. The facility shall be zoned for HVAC purposes to coordinate with departmental layouts to facilitate shutdown of portions of the building. The shutdown times will be based on the hours of operation of the occupied area. Within practical limits and life cycle cost considerations the medical and dental clinics should be zoned for HVAC purposes into areas which operate 8 or 24 hours. At least two chillers shall be provided with one sized to meet 24 hour load.

6.3.5 Fume Hoods. Fume hoods shall be designed with make-up air supplies to meet the air flow requirements of fume hoods. Controls is shall be provided with the fume hood to prevent continuous operation of the fume hood. The HVAC system should be designed to operate independently of the exhaust capabilities of the fume hoods. General purpose laboratory fume hoods will be designed for a minimum face velocity of 100 feet per minute (0.5 m/s) to the full open face.

6.3.6 Steam Generators. Decentralized steam generators at the point of use shall be provided for processed steam requirements.

6.4 Safety.

6.4.1 Air Intakes/Exhaust Vents. Outdoor intakes shall be located as far as practical but not less than 25 feet (7600 mm) from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, plumbing vent stacks, or from areas which may collect vehicular exhaust and other noxious fumes (plumbing and vacuum vents that terminate above the level of the top of the air intake may be located as close as 10 feet [3000 mm]). The bottom of outdoor air intakes serving central systems shall be located as high as practical but not less than 6 feet (1800 mm) above ground level, or if installed on the roof, 3 feet (900 mm) above the roof level. Medical gas storage rooms shall be vented directly to the exterior at the floor level.

6.4.2 Color Coding. Color coding and tagging for mechanical equipment shall be in accordance with OSHA.

6.4.3 Tripping Hazards. Tripping hazards such as condensate line in walk areas shall be avoided.

6.4.4 Noise and Vibration Shielding All prime equipment shall be mounted on curb or pad foundations isolated from the structure to prevent transmission of both vibration and resonant sound from the structure. Additionally all piping and ductwork connected to noise generating or prime mechanical equipment shall include noise and vibration elimination connections, isolating piping from equipment.

Section 7. PLUMBING AND PIPING SYSTEMS

7.1 Scope and Related Criteria.

7.1.1 Scope. The purpose of this section is to provide plumbing and piping systems criteria for the design of Navy Medical Clinics and Dental Clinics.

7.1.2 Related Criteria. The following is a list of mandatory design criteria on plumbing engineering which should be reviewed in conjunction with this section.

NAVFAC DM-3.01	Plumbing Systems
NAVFAC DM-3.05	Compressed Air and Vacuum Systems

7.2 Oxygen.

7.2.1 Supply. Oxygen outlets shall not be provided for medical clinics. Oxygen outlets for dental clinics shall be provided in accordance with Appendix A. Oxygen gas systems shall conform to NFPA 5O, Bulk Oxygen Systems and NFPA 99, Health Care Facilities. In addition to the above, gas pressure shall be reduced to 55 psi (3/9 kPa) prior to being introduced into the distribution system.

7.2.2 Capacity. Usage factor shall be 100% based on 20 liters/minute/ outlet. A manifold system may be located within the building when the total capacity of connected cylinders (primary and secondary banks) does not exceed 5000 cubic feet (141 mÀ3Ù) of free oxygen.

7.2.3 Pipe Sizing. The maximum pressure drop from the source of supply to the farthest outlet shall be 5 psi (35 kPa). Initial pressure shall be 55 psi (380 kPa). Terminal pressure shall be 50 psi (345 kPa). The minimum size of mains and risers should be 3/4 inch and the minimum size of branch lines should be 1/2 inch.

7.3 Nitrous Oxide.

7.3.1 Supply. Nitrous outlets shall not be provided for medical clinics. Nitrous oxide outlets for dental clinics shall be provided in accordance with Appendix A. Nitrous oxide shall be supplied from a manifold system consisting of a primary and a secondary bank of cylinders.

7.3.2 Capacity. Usage factor shall be 100%. provide a minimum of one-half cylinder on each bank per anesthetizing location; provide a minimum of two cylinders per bank.

7.3.3 Pipe Sizing. Pipe sizes are based on the same criteria as listed in this section for oxygen piping except that flow rates shall be based on 12 liters per minute per outlet.

7.4 Nitrogen.

7.4.1 Nitrogen outlets shall not be provided for medical clinics. Nitrogen outlets for dental clinics shall be provided in accordance with Appendix A. Nitrogen shall be supplied from a manifold system consisting of a primary and a secondary bank of cylinders.

7.4.2 Capacity. The usage factor shall be 100% based on 20 liters/min/ outlet.

7.4.3 Pipe Sizing. Pipe sizes are based on the same criteria as listed in this section for oxygen piping.

7.5 Medical Air. Medical air outlets shall not be provided for medical clinics.

7.6 Dental Air.

7.6.1 Supply. Dental air shall be provided to all dental operating unit utility boxes in accordance with Appendix A. Air compressors shall be oil-free reciprocating type with teflon rings or the rotary liquid type. Units shall be provided in duplicate. Units shall operate alternately and shall run simultaneously when a single unit cannot satisfy the demand. After-coolers shall be water-cooled and shall be capable of cooling the compressed air to within 15 degrees of the inlet water temperature Air dryers shall be the refrigerated type. Units shall be capable of cooling the compressed air from 95 deg. F (35 deg. C) at saturation to 35 deg. F (2 deg. C). An air dryer shall be provided for use with rotary-liquid type air compressors. An after-cooler and an air dryer shall be provided for use with reciprocating type air compressors. The compressor intake shall be from outside of the building. The intake pipe shall be equipped with an air filter and shall be so protected as to eliminate the possibility of drawing rain and snow into the compressor. Intakes shall be located as far as practical but not less than 25 feet (7500 mm) from any exhausts or plumbing vents. Pressure in the receiver shall be maintained at a minimum of 85 psi (586 kPa) and the residual pressure at dental units shall be 80 psi (551 kPa). The piping system shall be maintained at a constant inlet pressure of 85 psi (586 kPa). To maintain a constant line pressure, a pressure regulating valve shall be installed in the main supply line (at receiver outlet).

7.6.2 Capacity. Dental air for dental units shall be provided at 80 psi (550 kPa) and 3 cfm (0.14 L/sec) per outlet using the usage factors on Table 8. Dental air outlets in dental laboratories shall be provided at 30 psi (210 kPa) and 0.25 cfm(1.8 L/sec) per outlet using the usage factors on Table 9.

7.6.3 Pipe Sizing. Sizing of the distribution system shall be based on the calculated flow rates and a maximum line loss of 5 psi (35 kPa).

TABLE 8
Compressed Air for Dental Units (Chairs) Usage Factors

No. of units (chairs)	Usage factor
1-4	60%
5-12	50%
13-25	40%
26 or more	30%

TABLE 9
Compressed Air for Dental Laboratories Usage Factors

No. of outlets	Usage factor[1]
1-4	100%
5-10	50%
11-40	20%
over 40	10%

[1] If laboratory equipment includes a shell blaster, 8 cfm (225 L/m) at 80 psi (550 kPa) shall be provided to operate the unit.

7.7 Medical Vacuum. Medical vacuum outlets shall not be provided for medical or dental clinics.

7.8 Oral Evacuation.

7.8.1 Low Vacuum/High Volume System. Total capacity of the system shall be based on the number of DTRs and the usage factors on Table 10. The low vacuum/high volume oral evacuation system is a system in which the liquids and solids are prevented from reaching the vacuum pumps. The system is for the General Dental Treatment Room (DTR), the Oral Hygiene Treatment Room (OHT), and the Prosthetic DTR. The system shall provide a vacuum of 5 to 7 inches of mercury (17 kPa to 24 kPa) with an air flow of 10 to 12 cubic feet per minute (5-5.6 L/sec) at the nozzle (free air) for each DOR. A solids collector shall be provided in each DTR. Two or more collector tanks shall be provided to prevent solids and liquids from entering the pumps. The tanks shall be sized so that, with one tank out-of-service, the capacity of the remaining tank(s) shall be capable of supporting an 8-hour clinic work-load. The piping to and from each tank shall be valved so that the tank can be isolated from the system without interrupting the service. The tanks shall empty automatically when the system is shut down or should the tanks become overfilled. Pumps shall be the multi-stage turbine type. Two or more pumps shall be provided. The air from the pumps shall be exhausted to the outside or through a decontaminating baffle filter.

TABLE 10
Oral Evacuation Usage Factors

No. of units (chairs)	Usage factor
1-4	60%
5-12	50%
13-25	40%
26 or more	30%

7.8.2 High Vacuum/Low Volume System. The total capacity of the system shall be based on the number of DTRs and the usage factors in Table 14. The high vacuum/low volume oral evacuation system is a system in which the liquids enter the vacuum pumps and are discharged into the sanitary drainage system. The system is provided for the Periodontic DTR, the Endodontic DTR, and the Surgical DTR. The solids are intercepted and are prevented from reaching the pumps. The pumps shall be the wet rotary type. The system shall provide for an adjustable vacuum of up to 18 inches (60 kPa) of mercury with an air flow of 10-15 cubic feet per minute (5-7 L/sec) for each dental treatment room (DTR). An in-line filter shall be provided in each DTR and OHT.

1.8.3 Piping. Piping shall be designed with long-turn fittings.

7.9 Domestic Water.

7.9.1 Plumbing Fixtures. Plumbing fixtures shall be in accordance with Federal Specification WW-P-541. All fixtures used by medical staff shall be fitted with valves operated without the use of hands. Fixtures and control valves shall be selected which reduce the consumption of water in accordance with Table 11.

TABLE 11
Fixture Water Flow Rates

Fixture	Use	Flow Rate
Lavatories:	Clinical	0.5 gpm (0.03 L/sec)
Lavatories:	Public (self-closing)	0.25 gpm (0.016 L/sec)
Showers:	All except deluge	3.0 gpm (0.10 L/sec)
Water Closets:	Flush valve	3.0 gpm (0.19 L/sec)
Urinals:	All	2.0 gpm (0.13 L/sec)

7.9.2 Water Pressure. Pressure reducing valves shall be provided as necessary to provide 25 psi (172 kPa) at the most remote flush valve and 8 psi (55 kPa) at any other outlet. Where water pressure is not sufficient, water pressure shall be increased by using a hydro-pneumatic system

consisting of tank, compressed air system, and associated controls.

7.9.3 Laboratory Piping. A 6 feet (1800 mm) by 6 feet (1800 mm) water supply grid shall be provided in the ceiling above the laboratory. Plugged taps shall be provided every 6 feet (1800 mm). Floor sinks shall be provided in a 12 feet (3600 mm) by 12 feet (3600 mm) grid.

7.9.4 Hot Water Design Temperatures. Hot water shall be provided at 105 deg. F (40 deg. C). A re-circulating hot water system shall be provided. Branch (non-recirculating) hot water lines shall not exceed 25 feet (7500 mm) in length.

7.9.5 Deluge Shower and Eye Wash. Eye wash shall be connected directly to the sanitary drain. A floor drain shall be provided directly under the deluge shower.

7.9.6 Floor Drains. Floor drains shall be provided for the following areas only: hydrotherapy and cast room. All floor drains shall be provided with an automatic trap primer.

7.9.7 Solar Hot Water Systems. Solar hot water systems may be used when justified economically.

7.10 Distilled Water. Purified water systems shall be provided at the point of use.

7.10.1 Laboratory Water Quality Requirements. Pure water for laboratory use will require Type II water. In some cases, Type I water may be required. Water types are based on the College of American Pathologists specifications as shown on Table 12.

7.10.2 Type I Water. Type I water is used for tissue and cell culture methods, ultra-microchemical analyses, special and critical analytical chemical analysis where accuracy at mammograms and submammograms levels is necessary; and preparation of standard solutions.

7.10.3 Type II Water. Type II water is used for most routine clinical lab methods in chemistry, immunology, hematology, and other areas.

7.10.4 Type III Water. Type III water is used for most qualitative procedures; most procedures in urinalysis, parasitoiogy and histology; glassware washing, general lab tests not requiring Type II water.

TABLE 12
Laboratory Water Purity Requirements

	Type I	Type II	Type III
Resistivity (Megaohms @ 25 deg. C)	10	2.0	0.1
Silicate (mg/liter S:OÀ2Ù	0.05	0.10	1.0
pH	N.A.	N.A.	5.0-8.0
Microbiological Content (count per milliliter)	10	10,000	N.A.

7.10.5 Process Water. Water for use in glassware washers, sonic cleaners, and washer sterilizers shall not be more than 4 grains of hardness per gallon (70 ppm).

7.11 Natural Gas. Natural gas outlets shall be provided in accordance with Appendix A. Design of natural gas, manufactured gas and liquified gas systems shall be in accordance with NFPA 54, NFPA 58, and DM-3.01. Only low pressure gas (approximately 5 inches water column) shall be distributed within the building.

7.12 Waste.

7.12.1 Acid Waste. Acid waste systems shall be provided for all laboratories and x-ray film processor rooms. Acid waste systems shall consist of corrosion resistant piping and a dilution system including holding tank and sampling basin. Tank shall be located downstream of the last fixture and capacity shall be based on the flow of 100 percent of the fixtures in the system with applicable diversity factor with a holding period of 30 minutes. Tanks shall be provided with an immersible slow speed agitator and a 2 foot (600 mm) diameter access manhole.

7.12.2 Nuclear Decontamination Unit. Waste from Nuclear Decontamination Units shall flow by an accessible independent piping system to a double-wall holding tank with a minimum 1000 gallon (4000 L) capacity. The tank shall be designed to permit radiation monitoring and emptying. Nuclear waste systems shall be in compliance with the design standards established by the Nuclear Regulatory Commission (NRC), Code of Federal Regulations (CFR), 10 CFR Part 20, Standards for Protection Against Radiation.

7.13 Flexibility/Safety/Maintenance.

7.13.1 Overhead Piping. All pressurized plumbing systems shall be installed in ceiling plenums for servicing equipment on floor below. Service to equipment, etc., on floor above ceiling plenums is not acceptable.

7.13.2 Labeling. All piping systems shall be labeled with the name of substance contained within the piping system in accordance with MIL-STD-101. Labels shall be metal tags secured to valves and stenciled lettering on piping. Labeling shall appear on piping in at least one place in each room traversed by pipeline.

7.13.3 Sound and Vibration Shielding. Plumbing and piping shall be isolated from pumps and other prime equipment by flexible connections to prevent transmission of sound and vibration. All water piping shall be designed for less than 7 feet (2100 mm) per second velocity. All quick closing valves shall be provided with shock absorbers located on the upstream side of the valve. All pumps 1 horsepower and over, compressors, vacuum pumps, and other prime plumbing equipment shall be mounted on pads with vibration isolators. Sound and vibration shielding shall be in accordance with DM-3.10, "Noise and Vibration Control for Mechanical Equipment."

7.13.4 Maintenance. No pressure piping except automatic sprinkler protection piping shall be provided in the overhead above computer rooms, electrical equipment rooms, and telephone equipment rooms.

Section 8: ELECTRICAL ENGINEERING

8.1 Scope and Related Criteria.

8.1.1 Scope. The objectives of this section is to provide electrical design criteria to insure a safe, reliable, and economical electrical system for medical and dental clinics. The basic electrical design criteria is covered in the "Related Criteria" listed below and especially in NFPA, 70, 99 and 101.

8.1.2 Related Criteria. The following is a list of mandatory design criteria on electrical engineering and should be reviewed in conjunction with this section.

NAVFAC DM-4.01	Electrical Engineering, Preliminary Design Considerations
NAVFAC DM-4.02	Electrical Engineering, Power Distribution Systems
NAVFAC DM-4.03	Electrical Engineering, Switchgear and Relaying
NAVFAC DM-4.04	Electrical Engineering, Electrical Utilization Systems
NAVFAC DM-4.06	Electrical Engineering, Lightning Protection
NAVFAC DM-4.07	Electrical Engineering, Wire Communication and Signal Systems
NAVFAC DM-4.09	Energy Monitoring and Control Systems
NAVFAC DM-4.10	Electrical Engineering, Cathodic Protection

8.2 Electrical Engineering.

8.2.1 Lighting. Light sources for exterior lighting shall be limited to high pressure sodium, metal halide, or fluorescent. Light sources for interior applications shall be limited to fluorescent lighting, except where metal halide or high pressure sodium may be used effectively. Incandescent lighting is not permitted for either interior or exterior application except for electroencephalography (EEG) rooms or other rooms where fluorescent lights interfere with the medical equipment. Energy conserving fluorescent lamps and ballasts should be used to reduce energy consumption.

8.2.1.1 Lighting Level Ranges. Lighting levels for each programmed space shall be in accordance with Appendix A. The level indicated is the maximum design level for the average maintained general illumination. The level shall not be less than 10 percent below the level indicated. Task illumination will be required in some cases to supplement general lighting.

8.2.1.2 Lighting Controls. Energy conserving controls include two-level switching, timers, photoelectric cells, door switches, dimmers, and motion detectors.

8.2.1.2.1 Two-level Switching. Two-level switching shall be provided for all areas with design lighting levels greater than 50 footcandles (540 lux).

8.2.1.2.2. Timers. Timers shall be used in interior rooms occupied for a short duration, such as janitors closets, soiled utility rooms, equipment and storage rooms, and single occupant toilet rooms.

8.2.1.2.3 Photocells. Exterior lighting in areas with limited nighttime usage such as outpatient parking shall be controlled with a combination of photoelectric cells and timers. The photoelectric cell will be used to turn on the lighting systems at dusk and the timer would turn the lighting off at a preset time. All other exterior lighting should be controlled by photoelectric cells. These lighting systems would be turned on at dusk, remain on during the night, and be turned off at dawn. Interior lighting should be controlled by photocells in areas such as perimeter offices, perimeter corridors, waiting rooms and lobbies.

8.2.1.2.4 Door Switches. Door switches should be used for rooms which are infrequently occupied and the use of the room is only at times when the door is open. Examples of such rooms are: janitor's closets, communications closets, and electrical closets.

8.2.1.2.5 Occupancy Detectors. Motion and infrared detectors should be considered in lighting control when economically justified.

8.2.1.3 Exterior Lighting. Lighting for the security of personnel and property shall be designed so that all areas in the immediate vicinity of the facility and the parking lots are evenly illuminated with a minimum of shadowed areas. Illumination of parking areas shall be 1/2 footcandle (0.5 lux).

8.2.2 Emergency Power. An emergency source of power for medical and dental clinics shall not be provided unless specifically justified.

8.2.3 Isolated Power Systems. Isolated power systems shall not be routinely provided in non-flammable inhalation anesthetizing locations or wet patient care areas. When provided these systems shall comply with NFPA 99.

8.2.4 Ground Fault Protection. Local ground fault circuit interrupters (GFCI) shall be provided in accordance with NFPA 70. GFCI's shall only be provided in wet patient care areas. GFICs shall not be provided in public toilets, locker rooms and similar areas.

8.2.5 Hospital Grade Receptacles. Hospital grade receptacles are not required and should not be provided.

8.3 Flexibility and Expandability.

8.3.1 Power Distribution and Circuitry. Power distribution and circuitry shall be designed so that additional loads may safety be added to existing panels without danger of overload or requiring shutdown of the service. Branch circuit panelboards shall be designed with a minimum of 20 percent spare load capacity and 25 percent unused pole spaces for additional protective devices.

8.3.2 Laboratory Planning. Due to frequent changes in laboratory service, branch circuit panelboards should be provided for each laboratory to permit changes without disrupting the operations in adjacent areas.

Section 9: COMMUNICATIONS ENGINEERING

9.1 Scope and Related Criteria.

9.1.1 Scope. The objective of this section is to provide communication engineering criteria for the design of medical and dental clinics.

9.1.2 Related Criteria. The following is a list of mandatory design criteria on communications engineering which should be reviewed in conjunction with this section.

NAVFAC DM 4.07	Electrical Engineering, Wire Communication and Signal Systems

9.2 Communications Engineering.

9.2.1 Communication Functions. Communication functions for each programmed space shall be in accordance with Appendix A.

9.2.2 Equipment Room. An equipment room will be provided for telephone switching and associated equipment. The room must be provided with air conditioning, heating, humidity and dust control to meet equipment requirements. Piping, ductwork, or the systems which are not required in the telephone equipment room shall not pass through or be located in the room.

9.2.3 Communication Closets. Communications/telephone closets will be provided throughout the facility.

9.2.4 Ground System. The building ground system will be extended to the communication equipment rooms and closets and to the TRIMIS computer room.

9.2.5 Cable Trays. A common cable tray system should be provided in the corridor plenum space for all communication cables.

9.2.6 Pay Telephones. Pay stations will normally be required in the emergency area and the main entrance lobby.

9.3 Integrated Telephone/Intercom System.

Integrated telephone/intercom system outlets shall be provided in accordance with Appendix A. The telephone and intercom shall be integrated into a single system. The system shall have minimum capabilities as follows:

9.3.1 Inward/Outward Dialing. Both direct inward (DID) and direct outward dialing (DOD) of calls. Both DID and DOD dialing will be subject to restrictions which can be selectively applied to each station line.

9.3.2 Call Transfer. Call transfer/hold/three party conference feature whereby any station can transfer an incoming call to another station without operator assistance, place incoming calls on hold, and add a third party to the conversation.

9.3.3 Camp On Feature. Camp on feature which provides automatic call back when number called is busy. When the busy station becomes idle, the circuit will be automatically completed and both phones will ring.

9.3.4 Abbreviated Dialing. Abbreviated dialing of frequently called numbers, achieved by dialing a three-digit code.

Departments and other organizational elements will be provided with a one or two-digit intercom network which interconnects branches, sections, and work areas as required.

9.3.5 Emergency Override. Emergency override that provides the calling party the capability of entering the conversation on a busy line. A warning tone should be given to the talking parties to indicate that their connection is being entered.

9.3.6 Call Forwarding. Call-forwarding feature which will permit a phone user to forward all calls normally received by his/her phone to another phone.

9.3.7 Operator Intercept. Operator intercept for unassigned, discontinued or changed numbers and attempted violations of class of service restrictions.

9.3.8 Hands Free. Hands-free intercom communication will be provided by the telephone system.

9.3.9 Automatic Call Distribution. Automatic call distribution may be provided in the Central Appointments Office when justified.

9.3.10 Station Hunting. Incoming calls are routed to an idle line in a group when the line called is busy.

9.4 Nurse Call System. A tone/visual nurse call system shall be provided in selected outpatient areas as indicated in appendix A. These systems are similar to audio-visual systems but do not provide voice communication. The system consists of emergency pull cord stations, staff emergency stations, corridor dome lights, and annunciator panels.

9.4.1 Emergency Call Stations. These stations will consist of a pull chain switch easily accessible for patients, whether standing, sitting, or in the prone position. Pulling the cord will result in a priority call being relayed to the control station. The patient will receive a visual signal that the call has been registered. Calls from these stations can be cancelled only from the origin by depressing a reset switch.

9.4.2 Staff Emergency Call Stations. Red pushbutton stations shall be provided to initiate a staff emergency call to the control console.

9.4.3 Hall Lanterns. Hall lanterns shall be provided as part of the nurse call system above the doors of rooms with staff emergency stations, or emergency call stations. When calls originating from emergency call stations are registered, appropriate zone and room hall lanterns shall be illuminated indicating where the call originated.

9.5 Emergency Clinic. A nurse call system shall be provided with staff stations in each patient care room, treatment cubicle, emergency room, and cardiac room.

9.6 Public Address/Paging System. Speakers shall be provided in accordance with Appendix A and Table 13. The public address/program distribution system provides two functions: paging and background/program distribution. A large number of low power speakers will be used to keep the sound well

distributed, but at a low volume. Speakers in each area will be provided with on/off switches and volume controls. Controls for corridor speakers shall be located at nurses stations or control desks.

9.6.1 Paging. Paging shall be provided on all corridor speakers and other areas identified in Appendix A. Note that some areas receive music only. Both limited and general paging features will be provided. During paging, the central system will be muted at the speakers. The operator/receptionist and other designated telephones will have access to both wide and limited area features. Control stations, pharmacy, and other selected stations will have dial access to specified limited area paging through the telephone system.

9.6.2 Background Music/Program Distribution. One channel of music shall be provided to all speakers identified in Appendix A.

TABLE 13
Background Music Requirements

Area	Paging	Background Music
All Public Corridors	X	X
Waiting Areas	X	X
Staff Lounges	X	X
Conference Rooms	X	X

9.7 VHF/UHF Radio Paging. A radio paging system shall be provided and interconnected with the telephone system. A conduit, roof penetration, and roof top antenna mounting bracket shall be provided for the paging system.

9.8 Emergency Radio and Telemetry. An emergency radio and telemetry station shall be provided in the Emergency Department. An empty conduit for the antenna shall be provided from the work stations to the roof.

9.9 Tri-Service Medical Information systems (TRIMIS). Data communication outlets shall be provided as indicated in Appendix A and shall consist of a two-gang with a metallic separator. Conduits shall be provided for the TRIMIS system. Conduit and cable trays shall be provided to accommodate coaxial cable or a twisted pair wire from terminal locations throughout the facility to the TRIMIS computer room. One side of the box will contain a duplex receptacle.

9.10 TV Systems. Television outlets shall be provided in accordance with Appendix A. The television system consisting of antennas, distribution facilities, and antenna outlets will be provided for entertainment television, educational television, security monitoring, and clinical monitoring.

9.10.1 Entertainment and Educational Television. Entertainment and educational television antenna outlets shall be provided for each patient room, day room, clinic waiting room, classroom, conference room, auditorium, staff lounge, and duty room. Four channels of music will be distributed to patient bedrooms and will appear on unused TV channels.

9.11 Clocks. All clocks will be battery powered.

9.12 Intrusion Detection System. An intrusion detection system shall be provided to monitor all exterior doors, pharmacies, vaults, high value storage areas, funds collection and disbursement areas, and other selected critical/sensitive areas.

Section 10: FIRE PROTECTION ENGINEERING

10.1 Scope and Related Criteria.

10.1.1 Scope. The objective of this section is to provide criteria for the protection of personnel and property from loss due to fire, smoke, and related hazards.

10.1.2 Related Criteria. The following is a list of mandatory design criteria on fire protection engineering which should be reviewed in conjunction with this section.

MIL-HDBK-1008	Military Handbook, Fire Protection For Facilities Engineering Design and Construction
NFPA 101	Life Safety Code.

10.2 Fire Protection Engineering.

10.2.1 Classification. Medical clinics and dental clinics which do not provide services for non-ambulatory patients shall be designed as Ambulatory Health Care Occupancy as defined by NFPA 101 and Group B, Division 2 as defined by MIL-HDBK-1008. Medical clinics and dental clinics which provide services for non-ambulatory patients shall be designed as Health Care Occupancy as defined by NFPA 101 and Group I, Division 1 as defined by MIL-HDBK-1008.

10.2.2 Fire Resistance Ratings. The construction shall conform to the minimum requirements as described in MIL-HDBK-1008.

10.2.3 Furnishings and Graphics. Furnishings and graphics shall not be located so as to obstruct the means of egress or the visibility of the means of egress. Wall hangings, draperies, and cubicle curtains shall conform to the flame resistance requirements of both small and large scale tests specified in UL 214 or NFPA 701.

10.3 Detection.

10.3.1 Smoke Detectors. Smoke detectors shall be placed on either side of doors in smoke barriers, every 30 feet (9000 mm) in corridors, in all storage rooms, locker rooms, and waiting rooms. The smoke detector, when activated, shall release all smoke barrier doors held open and activate the fire alarm systems as described in NFPA 101. The smoke detectors shall conform to NFPA 72A and 72E. Smoke detectors shall also be placed in ducts which penetrate a smoke barrier. The detectors shall close the damper in the ducts as described in NFPA 101.

10.3.2 Signal Systems. The signal systems consist of the manual fire alarm system, the automatic fire detection system, the automatic smoke detection system, and the extinguishing system operation alarm as described in NFPA 101, 70 and 72A. Activation of the signal systems shall automatically sound a general audible and visual alarm and automatically transmit the alarm to the appropriate fire department. Fire alarm systems shall be specified to be a zone coded Positive Non-Interfering Successive (PNIS) multi-zone class A system with remote supervised annunciator panels as required. The system

shall be provided with a municipal box actuation and supervisory circuit. Fire alarm system shall be designed to supervise sprinkler flow and damper alarm and fire pump status.

10.3.2.1 Audible and Visual Indicators. Signaling devices shall be both audible and visual type using chimes and lights in patient areas and bells or horns and lights in other areas.

10.3.2.2 Alarm Activated Relays. Fire alarm system shall be designed with auxiliary alarm activated relays as required for shutdown, door release, elevator recall, fire and smoke damper release.

10.3.2.3 Alternate Power Supply. Each of the alarm and detection systems required shall be provided with an alternative power supply in accordance with NFPA 72A.

10.4 Containment.

10.4.1 High Hazard Areas. Any hazardous area shall be safeguarded in accordance with NFPA 101. Boiler and heater rooms, pharmacy, record storage, laboratories, soiled linen rooms, repair shops, and rooms for storage of combustible supplies and equipment, and hazardous quantities shall be protected by both one-hour rated fire resistant separation and a complete extinguishment system.

10.4.2 Laboratories. Laboratories shall be protected in accordance with NFPA 101 and NFPA 99.

10.4.3 Smoke Evacuation Systems. Smoke control systems for evacuation of smoke after a fire shall be provided by portable equipment.

10.5 Extinguishment.

10.5.1 Portable Fire Extinguishers. Portable fire extinguishers are needed even though the property is equipped with automatic sprinklers. Portable fire extinguishers shall be provided in accordance with NFPA 10.

10.5.2 Automatic Sprinkler System. One hundred percent automatic sprinkler systems shall be installed in medical and dental clinics. The sprinkler system shall be designed in accordance with NFPA 13. Navy Medical and Dental Clinics shall be considered a "light hazard" occupancy.

10.5.2.1 Wet Pipe. Wet pipe sprinkler systems shall be provided in all areas except where other systems described herein are required.

10.5.2.2 Dry Pipe. Dry pipe systems shall be provided only where freezing temperatures may damage the systems.

10.5.2.3 Pre-action Systems. Preaction sprinkler systems shall be provided for computer rooms, biomedical equipment repair rooms, and X-ray rooms.

APPENDIX A

ROOM BY ROOM DESIGN CRITERIA

KEY TO ARCHITECTURAL CRITERIA

(FIRST AND SECOND CHARACTERS)

CODE	WALL FINISH	FLOOR FINISH	BASE FINISH	CEILING FINISH	CEILING HEIGHT	CEILING SOUND INSULATION
A8	GW	VCT	R	ACT	8'-0"	YES
A9	GW	VCT	R	ACT	9'-0"	YES
A1	GW	VCT	R	ACT	10'-0"	YES
A0	GW	VCT	R	NONE	------	NO
B8	LGC-GW	VCT	R	ACT	8'-0"	YES
B9	LGC-GW	VCT	R	ACT	9'-0"	YES
B1	LGC-GW	VCT	R	GW	8'-0"	YES
C8	LGC-GW	SV	IV	ACT	8'-0"	YES
D8	LGC-GW	SV	IV	GW	8'-0"	YES
D9	LGC-GW	SV	IV	GW	9'-0"	YES
E8	CT	CT	CT	GW	8'-0"	YES
F8	VP	VCT	R	ACT	8'-0"	YES
F9	VP	VCT	R	ACT	9'-0"	YES
G9	LGC-CB	VCT	NONE	LGC-GW	9'-0"	YES
H8	GW	CAR	R	ACT	8'-0"	YES
J8	VP	VCT	R	GW	8'-0"	YES
K8	LGC-GW	QT	QT	GYP	8'-0"	YES
K9	LGC-GW	QT	QT	GYP	9'-0"	YES
L8	LGC-GW	QT	QT	ACT	8'-0"	YES
M8	CONC BLK	VCT	R	GW	8'-0"	NO
M0	CONC BLK	VCT	R	GW	--	NO
N9	CONC BLK	SV	NONE	GW	9'-0"	YES
N0	CONC BLK	VCT	R	NONE	--	NO
P0	CONC BLK	CON	NONE	NONE	---	NO
Q8	LGC-CB	SV	IV	LGC-GW	8'-0"	NO
PR	PREFABRICATED					
EX	EXTERIOR					

ACT	Acoustical Tile
C	Non-Slip Coating
CB	Concrete Block
CT	Ceramic Tile
CONC	Concrete
CP	Carpet
CW	Gypsum Wallboard
IV	Integral Vinyl
LGC	Liquid Glaze Coating
QT	Quarry Tile

THIRD CHARACTER

Code	Floor Loading (psf)
A	50
B	60
C	75
D	80
E	100
F	125

R	Rubber Base	G	150
SV	Solid Sheet Vinyl	H	200
VCT	Vinyl Composition Tile	I	250
VWF	Vinyl Wall Fabric	J	40
VP	Veneer Plaster		

KEY TO DOOR SCHEDULE

FIRST CHARACTER - DOOR SIZE

3	-	3 - 0
4	-	4 - 0
A	-	2 - 0 and 3 - 0
B	-	2 - 6 and 2 - 6

SECOND CHARACTER

A	-	NO VISION PANEL
B	-	SLIT VISION PANEL
C	-	FULL VISION PANEL
D	-	100 SQ. IN. VISION PANEL

THIRD CHARACTER

A	HW-145		
	HINGES	-	A8122 - 4 1/2 X4
	LOCKSET	-	F76
	STOP	-	L12251
B	HW-146		
	HINGES	-	------
	ROLLER LATCH	-	E19091
	DEADLOCK	-	E2152
	STOP	-	L12251
	PUSH PLATE	-	J301
	HOSPITAL ARM PULL	-	J400
	AUTOMATIC DOOR BOTTOM SOUND DEADENING GASKETS	-	------
C	HW-147		
	HINGES	-	------
	LOCKSET	-	F76
	STOP	-	L12251
	EMERGENCY DOOR RELEASE	-	A1882 OR A8892
D	HW-148		
	HINGES	-	------
	ROLLER LATCH	-	E19091
	STOP	-	L12251 (2)
	PUSH PLATE	-	J301 8" X 16"/20CM X 41CM
	HOSPITAL ARM PULL	-	J400 (2)
	ARMOR PLATE	-	J101 (2)
	FLUSH BOLT	-	L14081
	DUST PROOF STRIKE	-	L14021

(CONTINUED ON NEXT PAGE)

KEY TO SCHEDULE
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THIRD CHARACTER (CONTINUED)
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E	HW-149			
	HINGES	-	------	
	ROLLER LATCH	-	E19091	
	STOP	-	L12251	
	DEADLOCK	-	E2152	
	PUSH PLATE	-	J301	
	HOSPITAL ARM PULL	-	J400	
	ARMOR PLATE	-	J101	
	FLUSH BOLT	-	L14081	
	DUSTPROOF STRIKE	-	L14082	
F	HW-150			
	HINGES	-	------	
	ROLLER LATCH	-	E19091	
	STOP	-	L12251	
	DEADLOCK	-	E2152	
	PUSH PLATE	-	J301	8" X 16"/20CM X 41CM
	HOSPITAL ARM PULL	-	J401	
	ARMOR PLATE	-	J101	
G	HW-151			
	HINGES	-	------	
	ROLLER LATCH	-	E19091	
	DEADLOCK	-	E2152	
	STOP	-	L12251	
	CLOSER AND HOLD OPEN	-	C02052	
	PUSH PLATE	-	J301	8" X 16"/20CM X 41CM
	HOSPITAL ARM PULL	-	J401	
H	HW-152			
	HINGES	-	------	
	LOCK SET	-	F81	
	STOP	-	L12251	
	AUTOMATIC DOOR BOTTOM SOUND DEADENING GASKETS	-	------	
I	HW-153			
	HINGES	-	------	
	ROLLER LATCH	-	E19091	
	STOP	-	L12251	
	DEADLOCK	-	E2152	
	PUSH PLATE	-	J301	8" X 16"/20CM X 41CM
	HOSPITAL ARM PULL	-	J401	
J	HW-154			
	ROLLER LATCH	-	E19091	
	PUSH PLATE (2)	-	J301	
	CYL. LOCK & THUMB SET	-		

KEY TO DOOR SCHEDULE

THE LISTED ITEMS ARE COVERED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PUBLICATIONS OR THE BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA) PUBLICATION BUT ARE LISTED BY BHMA DESIGNATIONS. THE ITEMS CAN BE FOUND IN THE FOLLOWING DOCUMENTS:

ANSI PUBLICATIONS:

A156.1	BUTTS AND HINGES
A156.2	LOCKS AND LOCK TRIM
A156.3	EXIT DEVICES
A156.4	DOOR CONTROLS (CLOSERS)
A156.16	AUXILIARY HARDWARE

BHMA PUBLICATIONS:

1301	MATERIALS AND FINISHES

KEY TO MECHANICAL CRITERIA

FIRST TWO CHARACTERS = MINIMUM AIR CHANGES:

CODE	TOTAL	O/A
04	4	1
06	6	1.5
10	10	2.5
12	12	3
15	15	5

THIRD CHARACTER = TEMPERATURE/HUMIDITY:

CODE	DESCRIPTION
A	78deg.F(S)-68deg.F(W)/30-60%
B	78deg.F(S)-70deg.F(W)/30-60%
C	75deg.F/30-60%
D	70-78deg.F/30-60%
E	68-76deg.F/55+/-5%
F	75-80deg.F/55+/-5%
G	75deg.F(S)-68deg.F(W)/30-60%
H	85deg.F(S)-65deg.F(W)/30-60%
I	NONE
J	80deg.F/30-60%

FOURTH CHARACTER = AIR BALANCE:

CODE	DESCRIPTION
0	0
+	+
-	-
A	++
B	--
C	---
D	++--

FIFTH CHARACTER = FILTRATION:

CODE	DESCRIPTION
A	25%
B	25%&80%
C	25%&90%
D	25%,90%&99.97%
E	NONE

KEY TO MECHANICAL CRITERIA

REMAINING CHARACTERS = NOTES:

CODE	DESCRIPTION
G	TEMP CONTROLLED
H	NO MIN O/A REQ'D
I	EXHAUST TO OUTDOOR REQ'D
J	MIN O/A IS 1 AC/HR
K	MIN O/A IS 2 AC/HR
L	MAY REQUIRE HOODS
M	MAY REQUIRE HOODS & DUST COLLECTORS
N	ROOM EXHAUST DIRECTLY OVER PATIENT STATION.
O	NEGATIVE TO ANTEROOM; POSITIVE TO TOILET, ANTEROOM SHALL BE NEGATIVE TO CORRIDOR (FOR NEGATIVE ISOLATION ROOM). FOR POSITIVE ISOLATION ROOM, REVERSE AIR FLOW AND INCREASE FILTRATION.
P	EQUAL WITH CORRIDOR; NEGATIVE TO OPERATING ROOM.
Q	EQUAL TO OPERATING ROOM.
R	OFFICE EQUAL; LAB NEGATIVE.
S	EQUAL TO STERILE CORRIDOR; POSITIVE TO PUBLIC CORRIDOR.
T	EXHAUST ALL OUTSIDE APPLICABLE TO PROCESSING ONLY.
U	THE SPACE THAT HOUSES ETHYLENE OXIDE (ETO) STERILIZERS SHOULD BE DESIGNED TO MEET THE FOLLOWING GUIDELINES: (1) PROVIDE A DEDICATED LOCAL EXHAUST SYSTEM WITH ADEQUATE CAPTURE VELOCITY (I.E., WITH A MINIMUM CAPTURE OF 200 FPM) TO ALLOW FOR THE MOST EFFECTIVE INSTALLATION OF AN AIR HANDLING SYSTEM, I.E., EXHAUST OVER STERILIZED DOOR, ATMOSPHERIC EXHAUST VENT FOR SAFETY VALVE, EXHAUST AT STERILIZER DRAIN AND EXHAUST FOR THE AERATOR AND MULTIPLE LOAD STATION; (2) PROVIDE NEGATIVE PRESSURE IN ETO SOURCE AREAS SUCH AS SERVICE/AERATION AREAS; (3) ENSURE THAT GENERAL AIR FLOW IS AWAY FROM STERILIZER OPERATOR(S); (4) PROVIDE A DEDICATED EXHAUST DUCT SYSTEM FOR ETO. THE EXHAUST OUTLET TO THE ATMOSPHERE SHOULD BE AT LEAST 25 FT FROM ANY AIR INTAKE.
V	LINT FILTER SHOULD BE CONSIDERED OVER THE EXHAUST INLETS
W	OPTIONAL FOR OFFICE, EXHAUST AIR FROM LAB TO OUTSIDE
X	ORAL SURGERY ROOMS IN HOSPITALS WILL BE TREATED AS OPERATING ROOMS. DENTAL CLINICS OPERATING IN CONJUNCTION WITH A FULL SERVICE HOSPITAL WILL BE PROVIDED ORAL SURGERY ROOMS IN ACCORDANCE WITH THE FOLLOWING: MINIMUM AIR SUPPLY 12 AC/HR, MINIMUM OUTSIDE AIR SUPPLY 3 AC/HR, RECIRCULATION WITHIN THE ROOM IS NOT PERMITTED BUT EXHAUST TO THE OUTSIDE IS NOT REQUIRED.
Y	NEGATIVE TO OPERATING ROOM; POSITIVE TO CORRIDOR.
Z	AIR SUPPLIED FROM CORRIDOR.

KEY TO MEDICAL GAS CRITERIA

Column 1 — Number of Oxygen outlets

Column 2 — Number of Vacuum outlets. These outlets are Oral Evacuation in dental spaces and medical vacuum elsewhere.

Column 3 — Number of Compressed Air outlets. These outlets are dental compressed air in dental spaces, laboratory compressed air in laboratory spaces, and medical compressed air elsewhere.

Column 4 — Number of natural gas outlets.

Column 5 — Notes.

Notes

A. Number of outlets indicated in per bed, table workstation etc.

B. Provide 2 nitrous oxide outlets in operating rooms and 1 outlet in other designated rooms. All inhalation anesthesia or analgesia locations will have a gas evacuation system.

C. Provide 2 nitrogent outlets in operating rooms and 1 outlet in other designated rooms.

D. Each utility center requires 1 dental air and 1 oral evacuation.

E. Outlets indicated are for 6-8 bassinet nursery.

F. Provide one each oxygen, medical vacuum, and medical air at infant resuscitation area.

G. Notes B & F.

H. Notes B & C.

I. Provide one each oxygen, medical vacuum, nitrous oxide, nitrogen, dental air, oral evacuation. Locate oxygen, NÚ2¿O, N, and medical vacuum on utility column.

J. Provide medical vacuum not oral evacuation.

KEY TO ELECTRICAL SYSTEM CRITERIA

Code - XÚ1¿XÚ2¿XÚ3¿

XÚ1¿ - Level (footcandles)
- A - 5 fc
- B - 10 fc
- C - 20 fc
- D - 30 fc
- E - 50 fc
- F - 75 fc
- G -100 fc
- H -200 fc

XÚ2¿ - Control
- - - Normal manual wall switch
- A - Automatic control
- D - Dimmer
- K - Key operated switch
- M - Multiple switching to provide multilevel lighting
- T - Timer
- V - Variable control. Multiple switching with dimmer on lowest level.

XÚ3¿ - Notes
1. Provide color corrected lamps.

KEY TO COMMUNICATION CRITERIA

Code - XÚ1¿XÚ2¿XÚ3¿XÚ4¿XÚ5¿XÚ6¿XÚ7¿XÚ8¿XÚ9¿

Telephone Criteria - XÚ1¿XÚ2¿XÚ3¿XÚ4¿

XÚ1¿ - Type of Instrument
- A - Wall, single line, direct connect to Appointments Desk
- D - Desk, single line
- W - Wall, single line
- S - Desk, handsfree speaker, single line
- T - Wall, handsfree speaker, single line
- M - Desk, multiline
- C - Attendant console
- P - Pay

XÚ2¿ - Outlets/Room
- 1, 2, 3... - Specific number of outlets
- V - Number of outlets varies with size of facility
- W - Provide one outlet per workstation

XÚ3¿ - Class of Service
- A - Official Use. Access to other Class A, B, C, and I telephones and local commercial trunks, toll trunks, and other communication networks.
- B - Unofficial Use. Access to other Class A, B, C, and I telephones and local commercial trunks but not toll trunks.
- C - Official Use. Access to other Class A, B, C, and I telephones and local commercial trunks but not toll trunks.
- I - Internal Use. Intercommunications.

XÚ4¿ - Telephone notes.
1. Direct connect to central appointments.
2. Direct connect to supply control desk.
3. One telephone for two beds.

Nurse Call - XÚ5¿
- E - Clinic emergency call system
- P - Patient station
- S - Staff station
- D - Duty station
- T - Toilet emergency station
- C - Control console

Television - XÚ6¿
- W - TV outlet, wall mounted 18 in. AFF
- M - Multiple TV outlets, wall mounted 18 in. AFF
- C - TV outlet, wall mounted near ceiling
- S - Security TV camera outlet
- X - Central control/monitoring equipment for TV systems

Data - XÚ7¿
- D - Data outlet. May be integral with telephone system.

Security (IDS) / Misc. Alarms - XÚ8¿
- S - Security IDS outlet
- R - Refrigeration monitor/alarm
- A - Annunciator panel
- X - Central control/monitoring equipment

Notes - XÚ9¿
1. Provide one nurse call station per bed.
2. Provide an outlet and mounting bracket for a CCTV camera.

3. Connect to emergency suite call system.

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
0408	ADM DP MACHINE ROOM (6WKSTA)	NONE	A8E	3CA	10COAJ	*****	D**	D
0407	ADM DP OFFICE CH OF SERVICE	G.01	A8A	3AA	04A0A	*****	E**	D
0353	ADM EXEC CO CONFERENCE ROOM	6.05	H8A	3BA	04A0A	*****	DV*	T
1583	ADM EXEC CO OFFICER OFFICE	G.08	H8A	3BA	04A0A	*****	E**	S
0352	ADM EXEC CO SECY WAIT	G.06	H8A	3BA	04A0A	*****	C**	M
0351	ADM EXEC CO TOILET	NONE	E8C	3AJ	10ICEI	*****	CA*	*
7854	ADM EXEC OIC OFFICE	G.14	A8A	3BA	04A0A	*****	E**	S
7855	ADM EXEC OIC SECY WAIT	G.06	A8A	3BA	04A0A	*****	E**	D
0029	ADM EXEC SEN MEDICAL OFFICER	G.15	H8A	3BA	04A0A	*****	E**	D
0354	ADM EXEC XO OFFICER OFFICE	G.08	H8A	3BA	04A0A	*****	E**	S
0359	ADM EXEC XO SECY WAIT	G.06	H8A	3BA	04A0A	*****	C**	M
0355	ADM EXEC XO TOILET	NONE	E8C	3AJ	10ICEI	*****	CA*	*
7808	ADM OFF INFECTION CONTROL	G.01	A8A	3AA	04A0A	*****	E**	D
6153	ADM OFFICE	G.01	A8A	3AA	04A0A	*****	E**	D
6246	ADM OFFICE ACCOUNT SUPV	G.01	A8A	3AA	04A0A	*****	E**	D
0043	ADM OFFICE ADMIN ASST	G.27	A8A	3AA	04A0A	*****	E**	D
1733	ADM OFFICE ADMIN PERSONNEL	G.01	A8A	3AA	04A0A	*****	E**	D
5714	ADM OFFICE AEROSPMED CLER	G.01	A8A	3AA	04A0A	*****	E**	D
5715	ADM OFFICE AEROSPMED FILE ST	G.01	A8F	3CA	04A0A	*****	DA*	*
5713	ADM OFFICE AEROSPMED SAFETY	G.01	A8A	3AA	04A0A	*****	E**	D
6171	ADM OFFICE ASSIST CHIEF OFF	G.01	A8A	3AA	04A0A	*****	E**	D
6200	ADM OFFICE ASSISTCOUPT/MANG	G.01	A8A	3AA	04A0A	*****	E**	D
7806	ADM OFFICE ASSIST(1)	G.01	A8A	3AA	04A0A	*****	E**	D
6185	ADM OFFICE ASSISTANT (2 MAN)	G.01	A8A	3AA	04A0A	*****	E**	D
9002	ADM OFFICE BATTALION ADMIN	G.01	A8A	3AA	04A0A	*****	E**	D
6247	ADM OFFICE BUDGET ANALYST	G.28	A8A	3AA	04A0A	*****	E**	D
6003	ADM OFFICE CAREER COUNSELOR	G.29	A8A	3AA	04A0A	*****	E**	D
9012	ADM OFFICE CHAMPUS	G.30	A8A	3AA	04A0A	*****	E**	D
6050	ADM OFFICE CHIEF TECH	G.01	A8A	3AA	04A0A	*****	E**	D
8511	ADM OFFICE CLAIMS	G.01	A8A	3AA	04A0A	*****	E**	D
9808	ADM OFFICE CLERICAL RECEPTION	G.01	A8A	3AA	04A0A	*****	D**	M
5725	ADM OFFICE CLERK STENOGRAPHER	G.01	A8A	3AA	04A0A	*****	E**	D
0364	ADM OFFICE CLERKS	G.01	A8A	3AA	04A0A	*****	E**	D
4058	ADM OFFICE CLERKS (3)	G.01	A8A	3AA	04A0A	*****	E**	D
0016	ADM OFFICE CLERKS (4)	G.01	A8A	3AA	04A0A	*****	E**	D
5719	ADM OFFICE CLINICAL ADMIN	G.31	A8A	3AA	04A0A	*****	E**	D
7018	ADM OFFICE COUNSELOR	G.35	A8A	3AA	04A0A	*****	E**	D
7019	ADM OFFICE DIR OFFICE	G.01	A8A	3AA	04A0A	*****	E**	D
1491	ADM OFFICE ENVIRON HLTH OFF	G.40	A8A	3AA	04A0A	*****	E**	D
6129	ADM OFFICE EXEC MCPOC OFFICE	G.01	H8A	3AA	04A0A	*****	E**	D
4046	ADM OFFICE FACILITIES MANAG	G.01	A8A	3AA	04A0A	*****	E**	D
6069	ADM OFFICE FAM ADVOCACY	G.41	A8A	3AA	04A0A	*****	E**	D
5718	ADM OFFICE FINANCE OFFICE	G.42	A8A	3AA	04A0A	*****	E**	D
0419	ADM OFFICE FISCAL ACC CLERKS	G.01	A8A	3AA	04A0A	*****	E**	D
0416	ADM OFFICE FISCAL AGT CASH	G.01	A8A	3AA	04A0A	*****	E**	D
0414	ADM OFFICE FISCAL BR HEAD	G.43	A8A	3AA	04A0A	*****	E**	D
0418	ADM OFFICE FISCAL PAY CLERKS	G.01	A8A	3AA	04A0A	*****	E**	D
0417	ADM OFFICE FISCAL SUPPLY ASST	G.01	A8A	3AA	04A0A	*****	E**	D
0413	ADM OFFICE FISCAL/SUPPLY CH	G.44	A8A	3AA	04A0A	*****	E**	D
7856	ADM OFFICE HEALTH BENEFITS	G.45	A8A	3AA	04A0A	*****	E**	D
1488	ADM OFFICE INFECTION CTRL	G.46	A8A	3AA	04A0A	*****	E**	D

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
0595	ADM OFFICE INTERNAL REVIEW	G.47	A8A	3AA	04A0A	*****	E**	D
5729	ADM OFFICE MAA OFFICE	G.49	A8A	3AA	04A0A	*****	E**	M
4057	ADM OFFICE MANPOWER MANAG	G.50	A8A	3AA	04A0A	*****	E**	D
5717	ADM OFFICE MCPOC OFFICE	G.51	A8A	3AA	04A0A	*****	E**	D
0388	ADM OFFICE MIL LIAISON CLERKS	G.01	A8A	3AA	04A0A	*****	E**	D
6019	ADM OFFICE PERS SUPPORT BR	G.01	A8A	3AA	04A0A	*****	E**	D
6037	ADM OFFICE PETTY OFFICER	G.01	A8A	3AA	04A0A	*****	E**	D
4060	ADM OFFICE PREVENT MED CL (4)	G.01	A8A	3AA	04A0A	*****	E**	D
0028	ADM OFFICE PREVENT MED CL (3)	G.01	A8A	3AA	04A0A	*****	E**	D
6175	ADM OFFICE PROCURMENT CLERK	G.01	A8A	3AA	04A0A	*****	E**	D
0093	ADM OFFICE PROPERTY ACCOUNTS	G.56	A8A	3AA	04A0A	*****	E**	D
0017	ADM OFFICE STANDARD	G.01	A8A	3AA	04A0A	*****	E**	D
4047	ADM OFFICE SUPERVISOR	G.01	A8A	3AA	04A0A	*****	E**	D
4035	ADM OFFICE TYPING POOL (4)	NONE	A8A	3BA	04A0A	*****	E**	D
4033	ADM OFFICE UCA	G.01	A8A	3AA	04A0A	*****	E**	D
0461	ADM OPD SVCS ADM ASST	G.01	A8A	3AA	04A0A	*****	E**	D
0402	ADM OPD SVCS CHIEF	G.60	H8A	3AA	04A0A	*****	E**	S
0406	ADM OPD SVCS DUPL EQUIP	NONE	A8A	BCA	04A0A	*****	E**	*
4063	ADM OPD SVCS RECORD ST(2 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4064	ADM OPD SVCS RECORD ST(3 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4065	ADM OPD SVCS RECORD ST(4 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4066	ADM OPD SVCS RECORD ST(5 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4067	ADM OPD SVCS RECORD ST(6 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4068	ADM OPD SVCS RECORD ST(7 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4069	ADM OPD SVCS RECORD ST(8 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4070	ADM OPD SVCS RECORD ST(9 AISL	NONE	A8A	3AA	04A0A	*****	DA*	*
4071	ADM OPD SVCS RECORD ST (10 AIS	NONE	A8A	3AA	04A0A	*****	DA*	*
0039	ADM OPD SVCS RECORDS STORAGE	NONE	A8F	3CA	04A0A	*****	DA*	*
0405	ADM OPD SVCS SEC CLERKS	NONE	A8A	3AA	04A0A	*****	E**	D
0404	ADM OPD SVCS SEC OFFICER	G.01	A8A	3AA	04A0A	*****	E**	D
0462	ADM OPD SVCS SECY WAIT	G.06	H8A	3AA	04A0A	*****	C**	D
6198	ADM RECORDS	NONE	A8F	3CA	04A0A	*****	E**	D
6072	ADM RECORDS ARCHIVES	NONE	A8F	3CA	04A0A	*****	DA*	D
0391	ADM RECORDS GEN SVCS CEN F1	NONE	A8F	3CA	04A0A	*****	E**	D
8001	ADM RECORDS HEALTH RECORDS	NONE	A8F	3AA	04A0A	*****	E**	D
9011	ADM RECORDS HEALTH REC INFO	NONE	A8A	3AA	04A0A	*****	D**	D
6020	ADM RECORDS MED INF SUP OFF	G.01	A8A	3AA	04A0A	*****	E**	D
0459	ADM RECORDS OUTPAT REC CL	NONE	A8A	3AA	04A0A	*****	E**	D
0458	ADM RECORDS OUTPAT RECORDS	NONE	A8F	3CA	04A0A	*****	E**	D
9010	ADM RECORDS OUTPAT RECORDS ST	NONE	A8F	3CA	04A0A	*****	DA*	*
1581	ADM RECORDS RECEPTION AREA	NONE	H8E	3CA	04A0A	*****	D**	*
0013	ADM STORAGE	NONE	A8F	BAA	04A0A	*****	AA*	*
6014	ADM TRAINING A/V STORAGE	NONE	A8F	3AA	04A0A	*****	AA*	*
6150	ADM TRAINING A/V/STOR	NONE	A8F	3AA	04A0A	*****	AA*	*
0400	ADM TRAINING BRANCH CLERKS	G.01	A8A	3AA	04A0A	*****	E**	D
0398	ADM TRAINING BRANCH OFFICER	G.01	A8A	3AA	04A0A	*****	E**	D
0034	ADM TRAINING CLASS ROOM	G.07	A8A	3BA	04A0A	*****	FV*	W
6080	ANC LAB ADM CHIEF OF LAB	G.01	H8A	3BA	04A0A	*****	E**	D
0964	ANC LAB ADM CHIEF OF LAB SEC	G.06	A8A	3BA	04A0A	*****	E**	M
0965	ANC LAB ADM CLERICAL OFFICE	G.01	A8A	3BA	04A0A	*****	E**	D
1023	ANC LAB BACTERIAL MEDIA STOR	NONE	B8E	3CA	06A0A	*****	E**	*

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
6079	ANC LAB BLOOD DRAW	NONE	B8A	3AA	06A0A	*****	E**	W
0030	ANC LAB CONTROL	C.10	A8E	***	04A0A	*****	E**	S
6090	ANC LAB DONOR BLOOD PROC	NONE	B8E	3CA	06A+A	*****	D**	W
6091	ANC LAB DONOR BLOOD STOR	NONE	B8F	3CA	06A+A	*****	E**	*
1843	ANC LAB DONOR COMP PREP	NONE	B8A	3AA	06A+A	*****	E**	W
0211	ANC LAB DONOR DRAWING AREA	NONE	B8A	3AA	06A0A	*****	E**	W
0987	ANC LAB DONOR MOBIL STOR	NONE	B8F	3AA	04A0A	*****	DA*	*
0977	ANC LAB DONOR PRELIM PROC	NONE	B8A	3AA	06A0A	*****	E**	W
0981	ANC LAB DONOR RECOVRY	NONE	B8A	3AA	06A0A	*****	D**	*
0065	ANC LAB GLASS WASHING/STERIL	C.17	B8E	3CA	10A-AI	*****	E**	W
7740	ANC LAB INDUSTRIAL (12 STA)	C.12	B8E	3CA	06A-AI	*****	F**	D
7753	ANC LAB INDUSTRIAL (12)	C.12	B8E	3CA	06A-AI	*****	F**	D
0138	ANC LAB MEDIA PREP	NONE	B8E	3CA	06A-AI	*****	F**	W
7031	ANC LAB MOD AUTO ANALYZER	NONE	B8E	3CA	06A-AI	*****	F**	W
6096	ANC LAB MOD BACTERIOLOGY	C.13	B8E	3CA	06A-AI	*****	F**	W
5709	ANC LAB MOD BACTI ENTOMOL	C.13	B8E	3CA	06A-AI	*****	F**	W
7024	ANC LAB MOD CHEMISTRY	C.12	B8E	3CA	06A-AI	*****	F**	W
7033	ANC LAB MOD CHEMISTRY SPEC	C.12	B8E	3CA	06A-AI	*****	F**	W
6099	ANC LAB MOD CYTOLOGY	C.14	B8E	3CA	06A-AI	*****	F**	W
7027	ANC LAB MOD HEMATOLOGY	C.12	B8E	3CR	06A-AI	*****	F**	W
1359	ANC LAB MOD HISTOPATHOLOGY	C.15	B8E	3CA	06A-AI	*****	F**	W
6094	ANC LAB MOD OPEN WORK	C.12	B8E	3CA	06A-AI	*****	F**	W
0067	ANC LAB MOD OPEN WORK CL(2ST)	C.12	B8E	3CA	06A-AI	*****	F**	W
1025	ANC LAB MOD PARASITOLOGY	C.13	B8E	3CA	06A-AI	*****	F**	W
0185	ANC LAB MOD PATHOLOGIST WK ST	C.14	B8E	3CA	06A-AI	*****	F**	W
7025	ANC LAB MOD SEROLOGY	C.12	B8E	3CA	06A-AI	*****	F**	W
7032	ANC LAB MOD SPECIAL CHEM	C.12	B8E	3CA	06A-AI	*****	F**	W
7029	ANC LAB MOD SPECIAL HEMAT	C.12	B8E	3CA	06A-AI	*****	F**	W
7026	ANC LAB NOD SPECIFIC SEROL	C.12	B8E	3CA	06A-AI	*****	F**	W
1010	ANC LAB NOD TOXICOLOGY	C.13	B8E	3CA	06A-AI	*****	F**	W
7028	ANC LAB MOD URINALYSIS	C.12	B8E	3CA	06A-AI	*****	F**	W
7706	ANC LAB REFRIG STOR	NONE	A8F	3AA	06A-AI	*****	BA*	*
0942	ANC LAB SLIDE FILES	C.16	B8E	3CA	06A-AI	*****	DA*	*
8005	ANC LAB SMALL	C.12	B8E	3CA	06A-AI	*****	F**	W
0672	ANC LAB STORAGE	NONE	A8F	3CA	06A-AI	*****	CA*	*
6093	ANC LAB TECH WATCH RM	NONE	A8A	3AA	04A0A	*****	B**	D
6077	ANC LAB TOILET FEMALE SPEC	D.21	E8C	3AJ	10ICEI	*****	CA*	*
6076	ANC LAB TOILET MALE SPECIMEN	D.21	E8C	3AJ	10ICEI	*****	CA*	*
0064	ANC LAB VENIPUNCTURE	C.11	B8A	3AA	06A-A	*****	E**	W
6078	ANC LAB VENIPUNCTURE STATION	C.11	B8A	3AR	06A-A	*****	E**	*
6070	ANC PHARN ASST PHARM CHIEF	A.09	A8A	3BA	04A0A	*****	E**	D
0892	ANC PHARM CHIEF OFFICE	G.01	H8A	3BA	04A0A	*****	E**	S
0895	ANC PHARM CLERICAL	G.01	A8A	3BA	04A0A	*****	E**	M
8004	ANC PHARM DISPENSING SMALL	C.18	A8A	3AA	04A+A	*****	G**	W
6102	ANC PHARM FLAM STOR	NONE	M8F	3AA	04A-AI	*****	C**	*
0905	ANC PHARM TECH TOILET	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0904	ANC PHARN TECH WATCH RM	NONE	A8A	3AR	04A0A	*****	R**	D
4061	ANC PHARM TRIMIS ROOM	NONE	A8E	3CR	10COAJ	*****	D**	W
6242	ANC PHARM VAULT	NONE	M8F	***	04A0A	*****	AA*	*
0023	ANC PHARM WK AREA BULK CONP	C.20	A8E	3CA	04A+A	*11**	G**	W
0022	ANC PHARM WK AREA BULK STOR	NONE	A8F	3CA	04A+A	*****	DA*	W

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
8503	ANC PHARM WK AREA DISP SMALL	NONE	A8A	3AA	04A+A	*****	G**	W
0020	ANC PHARM WK AREA DISPENSING	C.18	A8E	3AA	04A+A	*****	G**	W
0903	ANC PHARM WK AREA HOSP ISSUE	MC.B1	A8E	3AA	04A+A	*****	G**	W
0021	ANC PHARM WK AREA ISSUE ASSB	C.21	A8E	3AA	04A+A	*****	G**	W
0019	ANC PHARM WK AREA PACK/LBL	C.19	A8E	3CA	04A+A	*****	G**	W
1059	ANC XRAY ADM ASST CHIEF	G.01	A8A	3AA	04A0A	*****	E**	D
1055	ANC XRAY ADM CHIEF OFFICE	G.01	H8A	3AA	04A0A	*****	E**	D
1062	ANC XRAY ADM CLERICAL	G.01	A8A	3AA	04A0A	*****	E**	D
0318	ANC XRAY BARIUM PREP	C.03	B8A	3AA	04A0A	*****	D**	*
0078	ANC XRAY DIAG CHEST XRAY	NONE	A1C	4AF	04B0A	*****	BM*	W
4123	ANC XRAY DIAG MAMMOGRAPHY	C.07	A8C	4AF	04B0A	*****	BM*	W
1090	ANC XRAY DIAG ULTRASOUND	C.08	A8C	4AF	04B0A	*****	EM*	W
0075	ANC XRAY DIAG XRAY/FLUOR	C.02	A1C	4AF	04B0A	*****	BM*	W
1066	ANC XRAY DIAG XRAY/GENERAL	C.01	A1C	4AF	04B0A	*****	BM*	W
0074	ANC XRAY DIAG XRAY/RAD CHEST	C.02	A1C	4AF	04B0A	*****	BM*	W
9021	ANC XRAY DIAG XRAY/RAD FLUOR	C.02	A1C	4AF	04B0A	*****	BM*	W
9028	ANC XRAY DIAG XRAY/TOMO	C.02	A1C	4AF	04B0A	*****	BM*	W
1073	ANC XRAY DRESS BOOTH FEM	NONE	A8A	3AJ	04B0A	*****	CA*	*
1072	ANC XRAY DRESS BOOTH MALE	NONE	A8A	3AJ	04B0A	*****	CA*	*
0072	ANC XRAY FILM FILE	C.05	B8H	3CF	04A0A	*****	DA*	W
0704	ANC XRAY FILM PROCESS AUTO	C.04	B8E	3AA	10G-AI	*****	C**	W
1087	ANC XRAY FILM PROCESSING	C.04	B8E	3AA	10G-AI	*****	C**	W
1076	ANC XRAY FILM SORTING AREA	NONE	A8E	3CA	10G-AI	*****	E**	W
1141	ANC XRAY FILM STORAGE CINE	NONE	A8F	3CF	04A0A	*****	AA*	W
1060	ANC XRAY FILM VIEW CONSULT	C.06	A8A	3CA	04A0A	*****	D**	W
1071	ANC XRAY PATIENT HOLDING	NONE	F8A	***	04B0A	*****	C**	*
1077	ANC XRAY PORTA X RAY STOR	NONE	F8C	***	04A0A	*****	AA*	*
1079	ANC XRAY TECHN TOILET	NONE	E8C	3AJ	10ICEI	*****	CA*	*
1078	ANC XRAY TECHN WATCH RM	NONE	A8A	3AA	04A0A	*****	CA*	D
1069	ANC XRAY TOILET FLOURO	NONE	E8C	3AJ	10ICEI	*****	C**	*
0720	CL A/V STOR	NONE	A8A	3AA	04A0A	*****	AA*	*
0041	CL ADM ADDRESSOGRAPH	NONE	A8A	3AA	04A0A	*****	CA*	D
0042	CL ADM CENTRAL APPOINTMENTS	F.04	A8A	3AA	04A0A	*****	E**	D
0457	CL ADM CENTRAL APPTS	F.04	A8A	3AA	04A0A	*****	E**	D
0387	CL ADM CHAMPUS OFFICE	G.01	A8A	3AA	04A0A	*****	E**	D
0456	CL ADM RECEPTION	NONE	A8A	3BA	04A0A	*****	D**	D
5700	CL CHIEF INDUST HYG	G.04	H8A	3AA	04A0A	*****	E**	S
6004	CL CHIEF OF SERVICE	G.04	H8A	3AA	04A0A	*****	E**	S
6133	CL CHIEF OF SERVICE SEC	G.04	H8A	3AA	04A0A	*****	E**	M
6137	CL CHIEF OF SERVICE TOILET	G.04	E8C	3AA	10ICEI	*****	E**	*
4083	CL CONFERENCE/ LIBRARY	G.05	A8A	3BA	04A0A	*****	E**	W
0002	CL CONTROL	D.01	A8E	***	04A0A	*****	E**	S
6065	CL CONTROL TRIAGE/FRONT DESK	D.10	A8E	***	04A0A	*****	E**	S
7860	CL CSR CENTRAL STERILIZATION	E.12	A8F	BCF	06G+A	*****	DA*	D
7859	CL CSR INSTRMNT SCRUB PREP	NONE	B8F	3CF	06G-A	*****	E**	W
0004	CL DOCTOR OFFICE	D.04	A8A	3AA	04A0A	*****	E**	D
0744	CL DOCTOR OFFICE OPHTHALMO	D.37	A8A	3AA	04A0A	*****	E**	D
0734	CL DOCTOR OFFICE OPTOMETRY	D.04	A8A	3AA	04A0A	*****	E**	D
0844	CL DOCTOR OFFICE PSYCHO	D.04	H8A	3AA	04A0A	*****	E**	D
0861	CL DOCTORS OFFICE PSYCHIATR	D.66	A8A	3AA	04A0A	*****	E**	D
9018	CL ER AMBULANCE DISPATCH	D.14	A8A	3CA	04A0A	*****	E**	S

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
8501	CL ER AREA HOLDING	NONE	F8A	***	04A0A	*****	E**	*
7817	CL ER CORPS SCREENING ROOM	D.03	A8A	3BE	04A0A	*****	E**	W
0054	CL ER EMERG EQUIP STORAGE	NONE	A8F	3AA	04A0A	*****	AA*	*
0048	CL ER EMERGENCY CONTROL	D.10	A8E	***	04A0A	*****	E**	S
9015	CL ER EMERGENCY ROOM	D.11	B9B	ABE	12E+BG	221*A	G**	T
0314	CL ER EMERGENCY WAITING RM	NONE	A8E	***	04A0A	*****	C**	P
0782	CL ER FAMILY WAIT CONSLT	A.09	H8A	3BA	04A0A	*****	C**	P
4017	CL ER INTERVIEW RM	NONE	A8A	3BA	04A0A	*****	D**	D
0055	CL ER LITTER WHEELCHAIR STOR	NONE	A8A	3AA	04A0A	*****	AA*	*
7800	CL ER MEDEVAC OFFICE	G.01	A8A	3AA	04A0A	*****	E**	D
7801	CL ER MEDEVAC WAITING	NONE	H8E	3C*	04A0A	*****	E**	P
1469	CL ER MOB EQUIP STORAGE	NONE	A8F	3AA	04A0A	*****	AA*	*
7816	CL ER STERILE STORAGE	NONE	A8F	3AA	04A+A	*****	D**	*
6122	CL ER SUBSTERILE AREA	D.12	B8F	3AA	06A+A	*****	D**	*
8003	CL ER SUBSTERILIZATION ROOM	D.12	B8F	3AA	06A+A	*****	D**	W
0005	CL EXAM ROOM	D.03	A8A	3AA	04A0A	*****	E**	W
9006	CL EXAM ROOM CH SERVICE	D.03	A8A	3AA	04A0A	*****	E**	W
0477	CL EXAM ROOM CHAIR TABLE	D.45	A8A	3AA	04A0A	*****	E**	W
0504	CL EXAM ROOM ECG	D.23	A8A	3AA	04A0A	111**	E**	W
1106	CL EXAM ROOM ENT	D.45	A8A	3AA	04A0A	*****	E**	W
9026	CL EXAM ROOM EYE LANE	D.36	A8A	3AA	04A0A	*****	EV*	W
0177	CL EXAM ROOM OBSERVATION	D.03	A8A	3AA	04A0A	*****	E**	W
0605	CL EXAM ROOM PHYS ASST	D.03	A8A	3AA	04A0A	*****	E**	W
0056	CL EXAM ROOM PHYSICAL	D.15	A8A	3AA	04A0A	*****	E**	W
0846	CL EXAM ROOM PSYCHIATRY	D.03	A8A	3AA	04A0A	*****	E**	W
0853	CL EXAM ROOM PSYCHOLOGIST	D.03	A8A	3AA	04A0A	*****	E**	W
7722	CL EXAM ROOM SOCIAL WORKER	D.03	A8A	3AA	04A0A	*****	E**	W
6041	CL EXAM ROOM STRESS TEST	D.03	A8A	3AA	04A0A	111**	E**	W
1104	CL EXAM ROOM THERAPY	D.03	A8A	3AA	04A0A	*****	E**	W
6064	CL EXAM ROOM THERMIA	D.03	A8A	3AA	04A0A	*****	E**	W
6038	CL EXAM ROOM VITAL SIGNS	D.03	A8A	3AA	04A0A	*****	E**	W
7752	CL FILE ROOM	NONE	A8F	3CA	04A0A	*****	E**	*
7741	CL FORM WRITING	NONE	A8A	3AA	04A0A	*****	E**	*
0044	CL IMMUNIZATION ROOM	D.06	A8A	3AA	04A0A	*****	E**	W
7839	CL INTERVIEW	NONE	A8A	3AA	04A0A	*****	E**	D
6131	CL LAB INDUST	C.12	B8E	3CA	06A-AI	*****	F**	W
0036	CL LAB INDUSTRIAL SANITATION	C.12	B8E	3CA	06A-AI	*****	F**	W
0519	CL LAB INFECT DISEASE	C.12	B8E	3CA	06A-AI	*****	F**	W
4041	CL LAB PREV MED	C.12	B8E	3CA	06A-AI	*****	F**	W
0886	CL LAB UROLOGY LAB	D.58	B8E	3CA	06A-AI	*****	F**	W
6143	CL LIBRARY/FILES STOR	NONE	A8F	3CA	04A0A	*****	E**	*
0135	CL LOUNGE	NONE	H8A	3BA	04A0A	*****	BA*	W
0285	CL LOUNGE CONFERENCE	NONE	H8A	3BA	04A0A	*****	DA*	W
7730	CL OFFICE AUDIO CLERK	G.03	A8A	3AA	04A0A	*****	E**	D
7842	CL OFFICE AVIAT MED TECHS(4)	G.03	A8A	3AA	04A0A	*****	E**	D
4045	CL OFFICE CLERICAL	G.01	A8A	3AA	04A0A	*****	E**	D
7721	CL OFFICE COMPENS/FILES	G.01	A8A	3AA	04A0A	*****	E**	D
7820	CL OFFICE COUNSELOR	NONE	A8A	3AA	04A0A	*****	E**	D
7823	CL OFFICE COUNSELOR (4 MAN)	NONE	A8A	3AA	04A0A	*****	E**	D
7822	CL OFFICE COUNSELOR (8 MAN)	NONE	A8A	3AA	04A0A	*****	E**	D
0327	CL OFFICE DEPT DIRECTOR	G.03	H8A	3AA	04A0A	*****	E**	S

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
7725	CL OFFICE DP ENTRY	G.03	A8A	3AA	04A0A	*****	E**	D
7857	CL OFFICE ENVIRO HEALTH	G.01	A8A	3AA	04A0A	*****	E**	D
7797	CL OFFICE FAMILY ADVOCACY	D.70	A8A	3AA	04A0A	*****	E**	D
5701	CL OFFICE INDUST HYG	G.03	A8A	3AA	04A0A	*****	E**	D
5703	CL OFFICE INDUST HYG CLER	G.03	A8A	3AA	04A0A	*****	E**	D
7743	CL OFFICE INDUST HYG CLER(3)	NONE	A8A	3AA	04A0A	*****	E**	D
5702	CL OFFICE INDUST HYG TECH	G.03	A8A	3AA	04A0A	*****	E**	D
4042	CL OFFICE INDUST HYG TECH (4)	G.03	A8A	3AA	04A0A	*****	E**	D
7742	CL OFFICE INDUST HYG TECH(15)	NONE	A8A	3AA	04A0A	*****	E**	D
7838	CL OFFICE INDUST HYG TECH (2)	G.03	A8A	3AA	04A0A	*****	E**	D
1184	CL OFFICE NUC MED TECHS	G.03	A8A	3AA	04A0A	*****	E**	D
0003	CL OFFICE NURSE	D.02	A8A	3AA	04A0A	*****	E**	D
6056	CL OFFICE NURSE PRACTITIONER	D.02	A8A	3AA	04A0A	*****	E**	D
7720	CL OFFICE OCC HLTH SUPV	G.01	A8A	3AA	04A0A	*****	E**	D
7841	CL OFFICE OCCUPAT HEALTH REC	G.03	A8A	3AA	04A0A	*****	E**	D
5720	CL OFFICE OCCUPAT HLTH CHF	G.61	A8A	3AA	04A0A	*****	E**	D
4040	CL OFFICE OCCUPAT HLTH CL(5)	G.01	A8A	3AA	04A0A	*****	E**	D
8518	CL OFFICE OCCUPAT HLTH CLER	G.01	A8A	3AA	04A0A	*****	E**	D
0780	CL OFFICE OCCUPAT HLTH DIR	G.61	H8A	3AA	04A0A	*****	E**	D
0614	CL OFFICE OCCUPAT HLTH INTERV	G.01	A8A	3AA	04A0A	*****	E**	D
5721	CL OFFICE OCCUPAT HLTH LIB	G.03	H8A	3AA	04A0A	*****	E**	D
5722	CL OFFICE OCCUPAT HLTH SUPR	G.03	A8A	3AA	04A0A	*****	E**	D
0774	CL OFFICE P MED TECH (14)	NONE	A8A	3AA	04A0A	*****	E**	D
7840	CL OFFICE PATIENT AFFAIRS	G.03	A8A	3AA	04A0A	*****	E**	D
1436	CL OFFICE PATIENT CONSULTANT	G.01	A8A	3AA	04A0A	*****	E**	D
0008	CL OFFICE PHYSICIAN ASST	D.04	A8A	3AA	04A0A	*****	E**	D
1190	CL OFFICE PHYSICISTS	D.04	A8A	3AA	04A0A	*****	E**	D
0696	CL OFFICE PODIATRISTS	D.04	A8A	3AA	04A0A	*****	E**	D
1489	CL OFFICE PREV MED TECHS 4	NONE	A8A	3AA	04A0A	*****	E**	D
0025	CL OFFICE PREV MED TECHS (3)	NONE	A8A	3AA	04A0A	*****	E**	D
4059	CL OFFICE PREVENT MED TECHS	NONE	A8A	3AA	04A0A	*****	E**	D
0035	CL OFFICE PREVENTIVE MED	G.03	A8A	3AA	04A0A	*****	E**	D
0845	CL OFFICE PSYCHIATRIST	G.03	H8A	3AA	04A0A	*****	E**	D
1103	CL OFFICE RAD HLTH ADM ASST	G.03	A8A	3AA	04A0A	*****	E**	D
5704	CL OFFICE RAD HLTH CHIEF	G.62	A8A	3AA	04A0A	*****	E**	D
8529	CL OFFICE RAD HLTH DIRECTOR	G.17	H8A	3AA	04A0A	*****	E**	D
8535	CL OFFICE RAD HLTH FILES	NONE	A8A	3AA	04A0A	*****	E**	*
7755	CL OFFICE RAD HLTH REC CLERK	G.03	A8A	3AA	04A0A	*****	E**	D
0330	CL OFFICE RAD HLTH SAMP	NONE	A8A	3AA	04A0A	*****	E**	*
7754	CL OFFICE RAD HLTH SECY WAIT	G.06	A8A	3AA	04A0A	*****	E**	M
1137	CL OFFICE RAD PHYSICS	G.03	A8A	3AA	04A0A	*****	E**	D
7809	CL OFFICE RADIATION AUDIT	G.03	A8A	3AA	04A0A	*****	E**	D
1496	CL OFFICE RADIATION SAFETY	G.03	A8A	3AA	04A0A	*****	E**	D
1013	CL OFFICE RADIOCHEM	G.03	A8A	3AA	04A0A	*****	E**	D
0843	CL OFFICE SOCIAL WORKER	G.03	A8A	3AA	04A0A	*****	E**	D
0545	CL OFFICE TECHNICIANS	G.03	A8A	3AA	04A0A	*****	E**	D
0572	CL OFFICE TECHNICIANS	G.03	A8A	3AA	04A0A	*****	E**	D
6140	CL OFFICE THERAPIST	G.03	A8A	3AA	04A0A	*****	E**	D
7821	CL OFFICE VOL COUNSELOR	NONE	A8A	3AA	04A0A	*****	E**	D
6180	CL OT CARPENTRY SHOP	D.56	A8F	3AA	06A-A	*****	E**	W
0047	CL PROCTO PATIENT PREP	D.07	B8A	4AE	04B0A	*****	D**	W

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
0046	CL PROCTO PATIENT TOILET	D.07	E8C	3AJ	10ICEI	*****	CA*	*
0045	CL PROCTO TREATMENT RM	D.07	B9B	4AE	06B-A	11***	E**	W
1217	CL PT CUBICLE (1)	D.52	B8C	***	04B0A	*****	D**	W
1218	CL PT CUBICLE WORK STA	D.52	B8C	***	04B0A	*****	D**	*
0884	CL PT DRESS CUBICLES	NONE	B8C	3AJ	04B0A	*****	D**	*
6155	CL PT EXERCISE ROOM (1)	D.52	B8C	3AA	06B0A	*****	D**	W
1219	CL PT EXERCISE/TREATMENT (1)	D.52	B8C	4AE	06B0A	*****	D**	W
1226	CL PT HYDRO CONT BODY TANK	D.51	K8C	***	06B-AI	11***	D**	*
1222	CL PT HYDRO WHLPL LEC (1)	D.51	K8C	***	06B-AI	*****	D**	*
8572	CL PT HYDRO WHLPL ARM/LEC(1)	D.51	K8C	***	06B-AI	*****	D**	*
7711	CL PT HYDRO WHLPL ARM (1)	D.51	K8C	***	06B-AI	*****	D**	*
1223	CL PT HYDRO LOWBOY WHLPL (1)	D.51	K8C	***	06B-AI	*****	D**	*
1224	CL PT HYDRO TREAT CUB (1)	D.51	K8C	***	06B-AI	*****	D**	*
0068	CL PT HYORO WHIRLPOOL (1)	D.51	K8C	***	06B-AI	*****	D**	*
1225	CL PT HYDRO WORK STATION	D.51	K8C	***	06B-AI	*****	D**	W
1573	CL PT OIC OFFICE	G.03	A8A	3BA	04B0A	*****	E**	D
1220	CL PT REHABILITATION EXER(1)	NONE	A8C	3AA	04B0A	11***	D**	W
0070	CL PT TOILET	D.55	E8C	3AJ	10ICEI	*****	D**	*
0644	CL SECY WAITING	G.06	A8A	3BA	04A0A	*****	E**	D
0542	CL SPEC ECG DRESS CUBICLES	NONE	A8A	3AJ	04A0A	*****	CA*	*
6053	CL SPEC ECG FILES	D.25	A8F	3CA	04A0A	*****	EA*	*
0058	CL SPEC ECG ROOM PHYS EXAM	D.23	A8A	3AA	04A0A	11***	E**	W
0540	CL SPEC ECG TESTING AREA	D.23	A8A	3AA	04A0A	11***	E**	*
0541	CL SPEC ECG WORK AREA	D.24	A8A	3AA	04A0A	*****	F**	W
6046	CL SPEC ECG/TREADMILL	D.26	A8A	3AA	04A0A	111**	E**	*
0637	CL SPEC EEG TEST AREA	D.28	A8A	3AA	04A0A	11***	EV1	*
0638	CL SPEC EEG WORK AREA	D.29	A8A	3AA	04A0A	*****	E**	W
0061	CL SPEC ENT AUDIO (1 MAN)	D.48	A8A	3BB	04A0E	*****	E**	W
0769	CL SPEC ENT AUDIO (4 MAN)	D.47	A8A	3BB	04A0E	*****	E**	W
7757	CL SPEC ENT AUDIO CLINICAL	D.48	A8A	3BB	04A0E	*****	E**	W
0771	CL SPEC ENT HEAR AID FIT RM	NONE	A8A	3BB	04A0A	*****	E**	W
0440	CL SPEC ENT LISTENING ROOM	NONE	A8A	3BB	04A0A	*****	E**	*
7798	CL SPEC EYE LENS FABR LAB	NONE	B8A	3AA	06A-A	*****	E**	W
0742	CL SPEC EYE LENS FIT/DISP	NONE	A8A	3AA	04A0A	*****	E**	W
0323	CL SPEC EYE OPHTH EDGING RM	NONE	A8A	3AA	04A0A	*****	E**	W
0741	CL SPEC EYE OPTICAL DISP	D.41	A8A	3AA	04A0A	*****	E**	W
0321	CL SPEC EYE OPTICAL FIT RM	D.41	A8A	3AA	04A0A	*****	E**	W
0747	CL SPEC EYE SCREENING RM	D.40	A8A	3AA	04A0A	*****	E**	W
7774	CL SPEC EYE TESTING	NONE	A8A	3AA	04A0A	*****	E**	W
5708	CL SPEC INTERVIEW ROOM	NONE	A8A	3AA	04A0A	*****	E**	D
0796	CL SPEC OB/GYN HISTORY	D.04	A8A	3AA	04A0A	*****	E**	D
7778	CL SPEC OPT CLERK RECEPTION	NONE	A8A	3BA	04A0A	*****	E**	S
7770	CL SPEC OPT EYELANE/OFFICE	D.31	A8A	3AA	04A0A	*****	E**	D
7771	CL SPEC OPT PARTS STORAGE	NONE	A8A	3AA	04A0A	*****	E**	*
7772	CL SPEC OPT REPAIR	NONE	A8A	3AA	04A0A	*****	E**	W
7776	CL SPEC OPT TESTING	NONE	A8A	3AA	04A0A	*****	E**	W
0701	CL SPEC ORTHO APPL FIT RM	D.18	A8B	3AA	04A0A	*****	E**	W
0700	CL SPEC ORTHO APPL FTG ADS	NONE	A8B	3AA	04A0A	*****	D**	W
8511	CL SPEC ORTHO CAST RM 1 TABLE	D.13	C8B	AAE	06A-A	11**A	E**	T
9852	CL SPEC ORTHO CAST RM 2 TABLE	NONE	C8B	AAE	06A-A	11**A	E**	T
9853	CL SPEC ORTHO CAST RM 3 TABLE	NONE	C8B	AAE	06A-A	11**A	E**	T

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
9854	CL SPEC ORTHO CAST RM 4 TABLE	D.17	C8B	AAE	06A-A	11**A	E**	T
0699	CL SPEC ORTHO PLASTER PREP	NONE	C8B	AAE	06A-A	*****	D**	W
6105	CL SPEC PATIENT HOLDING	NONE	A8A	3AA	04A0A	*****	C**	*
0062	CL SPEC PE CLINICAL EVAL	D.50	A8A	3AA	04A0A	*****	E**	W
0831	CL SPEC PED ISOLATION WAIT	D.22	A8A	3AA	06A-AI	*****	C**	*
0833	CL SPEC PED ISOLATION EXAM RM	D.22	A8A	3AA	06A-AI	*****	E**	D
6060	CL SPEC PED ISOLATION TOILET	D.23	E8C	3AJ	10ICEI	*****	CA*	*
0863	CL SPEC PSYC CHILD MIRROR RM	D.67	H8A	3AA	04A0A	*****	DV*	D
0864	CL SPEC PSYC CHILD PLAY OBS	D.67	H8A	3AA	04A0A	*****	DV*	*
7015	CL SPEC PSYC GROUP ACTIVITY	NONE	A8A	3AA	04A0A	*****	DV*	W
7016	CL SPEC PSYC GROUP THERAPY	NONE	H8A	3AA	04A0A	*****	DV*	W
0854	CL SPEC PSYC SOCIAL WORKER	D.04	A8A	3AA	04A0A	*****	E**	D
0860	CL SPEC PSYC TESTING	NONE	H8A	3AA	04A0A	*****	D**	W
7492	CL SPEC RAD HEALTH LAB	NONE	B8E	3AA	06A-AI	*****	E**	W
1498	CL SPEC RAD HEALTH OFFICE	G.03	A8A	3AA	04A0A	*****	E**	W
1608	CL SPEC RECOVERY	NONE	A8A	4AE	04A0A	111**	DV*	*
0544	CL SPEC TREADMILL	D.26	A8A	4AE	04A0A	111**	E**	W
0719	CL SPECIMEN COLLECTION	NONE	B8A	3AJ	06A-AI	*****	F**	*
0325	CL STAFF LOUNGE/MULT RM	NONE	H8A	3BA	04A0A	*****	DV*	W
0499	CL STORAGE	NONE	A8F	3AA	04A0A	*****	AA*	*
0386	CL STORAGE EQUIPMENT	NONE	A8F	3AA	04A0A	*****	AA*	*
0050	CL TREATMENT CUBICLE (1)	D.75	A8B	***	04A0A	*****	E**	*
0006	CL TREATMENT RM	D.05	B9B	4AE	04A0A	*****	E**	T
0746	CL TREATMENT RM EYE	D.39	B9B	4AE	04A0A	*****	E**	T
0568	CL TREATMENT RM INHAL THER	D.05	B9B	4AE	06A-AI	11***	E**	T
7858	CL UNIVERSAL USE ROOM	D.04	A8A	4AE	04A0A	*****	E**	D
1342	CL UTILITY APPAR STOR	D.08	B8F	3AA	04A0A	*****	CA*	*
0011	CL UTILITY CLEAN STORAGE	D.08	A8F	3AA	04A0A	*****	CA*	*
0012	CL UTILITY SOILED	D.09	B8F	3AA	04A0A	*****	CA*	*
0007	CL WEIGHTS AND MEASURES	D.19	A8A	3AA	04A0A	*****	E**	W
6021	CONFERENCE DEPT CONF/LOUNGE	NONE	H8A	3BA	04A0A	*****	DV*	W
9508	CONFERENCE RM 08 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9509	CONFERENCE RM 09 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9510	CONFERENCE RM 10 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9511	CONFERENCE RM 11 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9512	CONFERENCE RM 12 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9513	CONFERENCE RM 13 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9514	CONFERENCE RM 14 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9515	CONFERENCE RM 15 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9516	CONFERENCE RM 16 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9511	CONFERENCE RM 17 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9518	CONFERENCE RM 18 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9519	CONFERENCE RM 19 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9520	CONFERENCE RM 20 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9521	CONFERENCE RM 21 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9522	CONFERENCE RM 22 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9523	CONFERENCE RM 23 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9524	CONFERENCE RM 24 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9525	CONFERENCE RM 25 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9526	CONFERENCE RM 26 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9527	CONFERENCE RM 27 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
9528	CONFERENCE RM 28 SEAT	G.05	H8A	38A	04A0A	*****	DV*	W
9529	CONFERENCE RM 29 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9530	CONFERENCE RM 30 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9531	CONFERENCE RM 31 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9532	CONFERENCE RM 32 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9533	CONFERENCE RM 33 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9534	CONFERENCE RM 34 SEAT	G.05	H8A	38A	04A0A	*****	DV*	W
9535	CONFERENCE RM 35 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9536	CONFERENCE RM 36 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9537	CONFERENCE RM 37 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9538	CONFERENCE RM 38 SEAT	G.05	H8A	38A	04A0A	*****	DV*	W
9539	CONFERENCE RM 39 SEAT	G.05	H8A	3BA	04A0A	*****	DV*	W
9540	CONFERENCE RM 40 SEAT	G.05	H8A	38A	04A0A	*****	DV*	W
0027	DENT ADM ADMIN OFFICER	G.01	H8A	3BA	04A0A	*****	E**	D
0118	DENT ADM CLERK	G.01	A8A	38A	04A0A	*****	E**	D
0119	DENT ADM CMAA	G.01	A8A	38A	04A0A	*****	E**	D
0120	DENT ADM DEPT CHIEF	G.01	H8A	38A	04A0A	*****	E**	D
0237	DENT ADM FISCAL/SUPPLY	G.01	A8A	38A	04A0A	*****	E**	D
0228	DENT ADM RECORDS STORAGE	NONE	A8F	3CF	04A0A	*****	E**	*
0117	DENT ADM SDO OFFICE	G.02	A8A	3AA	04A0A	*****	E**	D
0233	DENT ADM SDO SECY WAIT	G.06	A8A	38A	04A0A	*****	D**	D
0033	DENT ADM TRAINING	G.01	A8A	38A	04A0A	*****	E**	D
0234	DENT ADM XO OFFICER OFFICE	G.01	H8A	38A	04A0A	*****	E**	D
0249	DENT CONSULTATION	E.12	A8A	38A	04A0A	*****	E**	D
0262	DENT CONTROL	D.01	A8E	***	04A0A	*****	E**	D
0143	DENT CSR CENTRAL STERIL	E.16	A8F	BCF	06G+A	*****	DA*	D
0142	DENT CSR INSTRMNT SCRUB PREP	E.16	B8F	3CF	06G-A	*****	E**	W
7853	DENT CSR STORAGE STERIL	E.16	A8F	3CF	04A0A	*****	E**	*
0276	DENT DTR ENDODONTIC	E.05	C8A	3AA	06G+A	*11*D	F*1	T
0106	DENT DTR GENERAL	E.01	C8A	***	06G+A	*11*D	F*1	T
0107	DENT DTR ORAL SURGERY	E.06	C8A	4AE	06G+A	121*I	F*1	T
0111	DENT DTR ORTHODONTIC	E.01	C8A	***	06G+A	*11**	F*1	T
0112	DENT DTR PEDODONTIC	E.01	C8A	3AA	06G+A	*11**	F*1	T
0109	DENT DTR PERIODONTIC	E.04	C8A	***	06G+A	*****	F*1	T
0108	DENT DTR PROSTHODONTIC	E.03	C8A	***	06G+A	*****	F*1	T
0250	DENT DUTY ROOM	NONE	C8A	3AA	04A0A	*****	B**	D
9807	DENT EQUIPMENT REPAIR	E.11	A8E	BCF	04A0A	*****	E**	W
0282	DENT HOUSEKEEP SUPPLY	NONE	A8A	3AA	04A0A	*****	BA*	*
0127	DENT HOUSEKEEPING	NONE	A8A	3AA	04A0A	*****	BA*	W
0123	DENT LAB CASTING/GRINDING	NONE	L8E	3CA	12A-AM	***1*	FA*	W
0124	DENT LAB CERAMICS	NONE	L8E	3CA	12A-AL	***1*	FA*	W
0247	DENT LAB DESIGN ROOM	NONE	L8E	3CA	12A-AL	*****	F**	W
0243	DENT LAB PROS BULK STORAGE	NONE	L8F	3CA	12A-A	*****	AA*	W
7846	DENT LAB PROS CASTING	NONE	L8E	3CA	12A-AL	***1A	F**	W
7845	DENT LAB PROS CUR/PROCESSING	NONE	L8E	3CA	12A-AL	***1A	F**	W
7843	DENT LAB PROS POLISH/PLASTER	NONE	L8E	3CA	12A-AL	***1A	F**	W
7844	DENT LAB PROS PORCELAIN	NONE	L8E	3CA	12A-AL	***1A	F**	W
0122	DENT LAB PROS BASIC (4 MAN)	NONE	L8E	3CA	12A-AL	***1A	F**	W
6211	DENT LAB PROS (LIMITED 1 MAN)	NONE	L8E	3CA	12A-AL	*****	F**	W
0126	DENT LINEN ROOM	NONE	A8F	3AA	04A0A	*****	DA*	*
4054	DENT ORAL EVAC EQUIP ROOM	NONE	M0E	3AA	04A0A	*****	AA*	D

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0113	DENT ORAL HYGIENE TREATMENT	E.02	C8A	3AA	06G+A	*11**	E**	T
0136	DENT PREVENTIVE DENISTRY RM	E.10	C8A	3AA	06G+A	*****	E**	T
0130	DENT RECOVERY ROOM	E.08	A8A	4AE	04A0A	11**J	DV1	*
4049	DENT REPAIR ADMIN	E.11	A8A	3AA	04A0A	*****	E**	W
4056	DENT REPAIR ELECTRONICS	E.11	A8E	3AA	04A0A	*****	E**	W
4053	DENT REPAIR MACHINE TOOLS	E.11	A8E	3AA	04A0A	*****	E**	W
4050	DENT REPAIR SHOP	E.11	A8E	3AA	04A0A	*****	E**	W
4051	DENT REPAIR STORAGE	E.11	A8F	3AA	04A0A	*****	E**	W
0129	DENT SCRUB ALCOVE	E.01	C8A	***	06A+AY	*****	E**	*
7716	DENT STERILIZATION ROOM	E.12	B8F	4CF	06G+A	*****	E**	W
5732	DENT STORAGE	NONE	A8F	3AA	04A0A	*****	AA*	*
0125	DENT SUPPLY STORAGE	NONE	A8F	4CF	04A0A	*****	AA*	*
0280	DENT X RAY CEPHALOMETRIC	E.09	A8A	4AF	04A0A	*****	BM*	W
0115	DENT X RAY DARK ROOM/AUTO PRO	E.09	A8A	4AF	10A-AI	*****	BM*	W
0266	DENT X RAY EXPOSURE W/PANO	E.09	A8A	4AF	04A0A	*****	BM*	W
0114	DENT X RAY EXPOSURE/PANO	E.09	B8A	4AF	04A0A	*****	BM*	W
0091	DUTY BEDROOM COW	NONE	H8A	3AA	04A0A	*****	B**	D
0088	DUTY BEDROOM MOOD	NONE	H8A	3AA	04A0A	*****	B**	D
9401	DUTY CORPSMEN DUTY RM 1 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9402	DUTY CORPSMEN DUTY RM 2 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9403	DUTY CORPSMEN DUTY RM 3 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9404	DUTY CORPSMEN DUTY RM 4 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9405	DUTY CORPSMEN DUTY RM 5 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9406	DUTY CORPSMEN DUTY RM 6 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9407	DUTY CORPSMEN DUTY RM 7 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9408	DUTY CORPSMEN DUTY RM 8 PER	NONE	A8A	3AA	04A0A	*****	B**	D
9409	DUTY CORPSMEN DUTY RM 9 PER	NONE	A8A	3AA	04A0A	*****	B**	D
6147	DUTY RM TOILET	NONE	E8C	3AJ	10ICEI	*****	CA*	*
1517	DUTY STUDENT BDRM	NONE	A8A	3AA	04A0A	*****	B**	D
6210	DUTY WATCH TOILETS	NONE	H8C	3AJ	10ICEI	*****	CA*	*
1612	GEN CLEANING EQUIP	NONE	B8E	3AA	10ICEI	*****	AA*	*
1723	GEN CLEANING GEAR	E.08	B8E	3AA	10ICEI	*****	AA*	*
8000	GEN CLINICAL RECEPTION	NONE	A8E	***	04A0A	*****	D**	C
7783	GEN COPY MACHINE/COLLATING	NONE	A8E	BCA	06A0A	*****	E**	*
7701	GEN DRESSING BOOTH	NONE	A8A	3AJ	04A0A	*****	CA*	*
1714	GEN EQUIP CLEANUP	NONE	A8E	3AA	10ICEI	*****	DA*	*
0565	GEN EQUIP PREP	NONE	A8E	3AA	04A0A	*****	DA*	*
6138	GEN EQUIP STORAGE	NONE	A8F	BAA	04A0A	*****	AA*	*
1351	GEN EQUIP SUPPLY STOR	NONE	A8F	BA*	04A0A	*****	AA*	*
6192	GEN GARAGE	NONE	EXT	***	-----	*****	A**	*
0425	GEN INFO /MAA	G.49	A8A	***	04A0A	*****	D**	C
1676	GEN INFO CONTROL	NONE	A8E	***	04A0A	*****	C**	C
0015	GEN JANITOR CLOSET	F.08	C8A	3AA	10ICEI	*****	AA*	*
0026	GEN LOBBY	NONE	L8E	***	04A0A	*****	C**	*
0001	GEN MISCELLANEOUS EQUIPMENT	****	***	***	*****	*****	***	*
0144	GEN STERILIZER EQUIPMENT	D.12	B8F	3AA	10IBE	*****	DA*	*
1337	GEN STRETCHER STORAGE	NONE	A8F	3AA	04A0A	*****	E**	*
5707	LOCKER CONTAM LKR FEM	NONE	D8C	3AJ	10ICEI	*****	CA*	W
7741	LOCKER CONTAM LKR FEM(10)	NONE	D8C	3AJ	10ICEI	*****	CA*	W
5706	LOCKER CONTAM LKR MALE	NONE	D8C	3AJ	10ICEI	*****	CA*	W
9606	LOCKER RM 06 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W

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9607	LOCKER RM 07 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9608	LOCKER RM 08 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9609	LOCKER RM 09 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9610	LOCKER RM 10 LKRS	NONE	A8C	3AJ	04A-A	*****	CA*	W
9611	LOCKER RM 11 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9612	LOCKER RM 12 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9613	LOCKER RM 13 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9614	LOCKER RM 14 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9615	LOCKER RM 15 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9616	LOCKER RM 16 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9617	LOCKER RM 17 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9618	LOCKER RM 18 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9619	LOCKER RM 19 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9620	LOCKER RM 20 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9621	LOCKER RM 21 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9622	LOCKER RM 22 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9623	LOCKER RM 23 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9624	LOCKER RM 24 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9625	LOCKER RM 25 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9626	LOCKER RM 26 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9627	LOCKER RM 27 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9628	LOCKER RM 28 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9629	LOCKER RM 29 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9630	LOCKER RM 30 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9631	LOCKER RM 31 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9632	LOCKER RM 32 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9633	LOCKER RM 33 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9634	LOCKER RM 34 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9635	LOCKER RM 35 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9636	LOCKER RM 36 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9637	LOCKER RM 37 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9638	LOCKER RH 38 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9639	LOCKER RM 39 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9640	LOCKER RM 40 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9706	LOCKER RM FEM 06 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9707	LOCKER RM FEM 07 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9708	LOCKER RM FEM 08 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9709	LOCKER RM FEM 09 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9710	LOCKER RM FEM 10 LKRS	NONE	A8C	3AJ	04A-A	*****	CA*	W
9711	LOCKER RM FEM 11 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9712	LOCKER RM FEM 12 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9713	LOCKER RM FEM 13 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9714	LOCKER RM FEM 14 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9715	LOCKER RM FEM 15 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9716	LOCKER RM FEM 16 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9717	LOCKER RM FEM 17 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9718	LOCKER RM FEM 18 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9719	LOCKER RM FEM 19 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9720	LOCKER RM FEM 20 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9721	LOCKER RM FEM 21 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9722	LOCKER RM FEM 22 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
9723	LOCKER RM FEM 23 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9724	LOCKER RM FEM 24 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9725	LOCKER RM FEM 25 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9726	LOCKER RM FEM 26 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9727	LOCKER RM FEM 27 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9728	LOCKER RM FEM 28 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9729	LOCKER RM FEM 29 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9730	LOCKER RM FEM 30 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9731	LOCKER RM FEM 31 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9732	LOCKER RM FEM 32 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9733	LOCKER RM FEM 33 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9734	LOCKER RM FEM 34 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9735	LOCKER RM FEM 35 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9736	LOCKER RM FEM 36 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9737	LOCKER RM FEM 37 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9738	LOCKER RM FEM 38 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9739	LOCKER RM FEM 39 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
9740	LOCKER RM FEM 40 LKR	NONE	A8C	3AJ	04A-A	*****	CA*	W
1532	LOCKER RM TOIL/SHOW F 3 FIX	NONE	E8C	3AJ	10ICEI	*****	CA*	*
1528	LOCKER RM TOIL/SHOW F 4 FIX	NONE	E8C	3AJ	10ICEI	*****	CA*	*
1530	LOCKER RM TOIL/SHOW M 3 FIX	NONE	E8C	3AJ	10ICEI	*****	CA*	*
1526	LOCKER RM TOIL/SHOW M 6 FIX	NONE	E8C	3AJ	10ICEI	*****	CA*	*
4082	MECH LARGE MECHANICAL MODULE	NONE	B8E	3AA	10ICEI	*****	AA*	*
4081	MECH SMALL MECHANICAL MODULE	NONE	B8E	3AA	10ICEI	*****	AA*	*
9301	PUBLIC TOILET FEM 01 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9302	PUBLIC TOILET FEM 02 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9303	PUBLIC TOILET FEM 03 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9304	PUBLIC TOILET FEM 04 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9305	PUBLIC TOILET FEM 05 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9306	PUBLIC TOILET FEM 06 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9307	PUBLIC TOILET FEM 07 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9308	PUBLIC TOILET FEM 08 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9309	PUBLIC TOILET FEM 09 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9310	PUBLIC TOILET FEM 10 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9321	PUBLIC TOILET MALE 01 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9322	PUBLIC TOILET MALE 02 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9323	PUBLIC TOILET MALE 03 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9324	PUBLIC TOILET MALE 04 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9325	PUBLIC TOILET MALE 05 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9326	PUBLIC TOILET MALE 06 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9327	PUBLIC TOILET MALE 07 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9328	PUBLIC TOILET MALE 08 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9329	PUBLIC TOILET MALE 09 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
9330	PUBLIC TOILET MALE 10 WC	NONE	E8C	3AJ	10ICEI	*****	CA*	*
7746	RAD CAS DRESSING	H.01	B9A	3AA	06A0A	*****	E**	*
7745	RAD CAS SHOWER ROOM	H.02	B9C	***	10ICEI	*****	E**	*
7744	RAD CAS TREATMENT ROOM	H.02	B9B	4AE	06A0A	*****	E**	T
9046	SPT HOUSEKEEPING	NONE	B8E	3AA	04A0A	*****	E**	W
1485	SPT HSKP CHARGING ROOM	NONE	B8H	3AA	10H-EZ	*****	BA*	*
1484	SPT HSKP EQUIP STORAGE	NONE	B8F	3AA	04A0A	*****	AA*	*
6059	SPT LOUNGE	NONE	A8A	3BA	04A0A	*****	E**	D

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
0534	SPT LOUNGE F EMP	NONE	H8A	3BA	04A0A	*****	BA*	W
1533	SPT LOUNGE M EMP	NONE	H8A	3BA	04A0A	*****	BA*	W
7805	SPT LOUNGE STAFF	NONE	H8A	3BA	04A0A	*****	BA*	W
5716	SPT WELF VENDING AREA	NONE	A8E	3CA	10ICEI	*****	CA*	*
1474	SUP CONTROL ISSUE	NONE	A8E	3AA	04A0A	*****	E**	D
7785	SUP F/S UCA	NONE	A8F	3AA	04A0A	*****	E**	D
7727	SUP MED EQ REP ASSM	NONE	A8E	3AA	04A0A	*****	E**	D
0131	SUP MEDICAL EQUIP REPAIR	NONE	A8E	BCF	04A0A	*****	D**	W
7795	SUP MEDICAL EQUIPMENT REP(14)	NONE	A8E	BCF	04A0A	*****	E**	W
0403	SUP OFFICE ASST CHIEF	G.01	A8A	3AA	04A0A	*****	E**	D
6174	SUP OFFICE CONTRL SUPERVISOR	G.01	A8A	3AA	04A0A	*****	E**	D
7707	SUP OFFICE FILES RECORDS	NONE	A8F	3AA	04A0A	*****	DA*	*
6112	SUP OFFICE FOREMAN	G.01	A8A	3AA	04A0A	*****	E**	D
0420	SUP OFFICE SUPPLY BRANCH HD	G.63	A8A	3AA	04A0A	*****	E**	D
0423	SUP OFFICE SUPPLY CLERKS (2)	NONE	A8A	3AA	04A0A	*****	E**	D
1473	SUP RECEIVE SHIP DOCK	NONE	M0A	***	*****	*****	C**	A
1468	SUP RECEIVING ISSUE	NONE	M0I	3AA	04A0A	*****	D**	D
6176	SUP SECY WAIT	G.06	A8A	3AA	04A0A	*****	E**	M
1483	SUP STORAGE EQUIPMENT	NONE	M0F	3AA	04A0A	*****	AA*	*
0907	SUP STORAGE FLAMMABLE	NONE	M8F	3AA	06A-AI	*****	AA*	*
6068	SUP STORAGE FORMS	NONE	M0F	3AA	04A0A	*****	AA*	*
0566	SUP STORAGE GAS CYLINDERS	NONE	M0F	3AA	04A0A	*****	AA*	*
6013	SUP STORAGE GEAR	NONE	M0F	3AA	04A0A	*****	AA*	*
8507	SUP STORAGE GEN MEDICAL SM	NONE	M0F	3AA	04A0A	*****	AA*	*
1486	SUP STORAGE GENERAL EQUIP	NONE	M0F	3AA	04A0A	*****	AA*	*
0094	SUP STORAGE GENERAL MEDICAL	NONE	M0F	3AA	04A0A	*****	AA*	*
7847	SUP STORAGE GENERAL MED CL	NONE	M0F	3AA	04A0A	*****	AA*	*
7708	SUP STORAGE MOBILE/EQUIP	NONE	M0F	3AA	04A0A	*****	AA*	*
0332	SUP STORAGE RAD HLTH LAB	NONE	A8F	3AA	04A0A	*****	E**	D
6205	SUP STORAGE REFRIGERATED	NONE	M8I	3AA	PRE	*****	AA*	*
0906	SUP STORAGE SECURE	NONE	M8F	3AA	04A0A	*****	AA*	*
6156	SUP STORAGE UTILITY	NONE	M8F	3AA	04A0A	*****	AA*	*
0024	SUP STORAGE VAULT	NONE	M8F	***	04A0A	*****	AA*	*
0014	TOILET FEMALE (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0196	TOILET FEMALE STAFF (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0195	TOILET MALE STAFF (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0823	TOILET PED DIAP (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0791	TOILET SHOWER (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
7810	TOILET SHOWER FEM (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
7811	TOILET SHOWER MALE (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0009	TOILET SPECIMEN (1 WC)	D.21	E8C	3AJ	10ICEI	*****	CA*	*
0031	TOILET STAFF (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0482	TOILET STAFF (1 WC)	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0412	TOILET STAFF FEM 2WC 2LAV	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0411	TOILET STAFF MALE 2WC 2LAV	NONE	E8C	3AJ	10ICEI	*****	CA*	*
0454	TOILET UNISEX (1 WC)	D.21	E8C	3AJ	10ICEI	*****	CA*	*
1231	TOILET WHEELCHAIR (1 WC)	NONE	E8C	3AJ	10ICEI	*****	AA*	*
0077	TOILET X RAY (1 WC)	NONE	E8C	3AJ	10ICEI	*****	AA*	*
9558	TRAINING/CLASSROOM 08 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9559	TRAINING/CLASSROOM 09 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9560	TRAINING/CLASSROOM 10 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T

BSU	ROOM NAME	PLATE	ARCH	DR	MECH	GAS	ELEC	
9561	TRAINING/CLASSROOM 11 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9562	TRAINING/CLASSROOM 12 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9563	TRAINING/CLASSROOM 13 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9564	TRAINING/CLASSROOM 14 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9565	TRAINING/CLASSROOM 15 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9566	TRAINING/CLASSROOM 16 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9567	TRAINING/CLASSROOM 17 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9568	TRAINING/CLASSROOM 18 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9569	TRAINING/CLASSROOM 19 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9570	TRAINING/CLASSROOM 20 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9571	TRAINING/CLASSROOM 21 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9572	TRAINING/CLASSROOM 22 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9573	TRAINING/CLASSROOM 23 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9574	TRAINING/CLASSROOM 24 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9575	TRAINING/CLASSROOM 25 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9576	TRAINING/CLASSROOM 26 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9577	TRAINING/CLASSROOM 27 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9578	TRAINING/CLASSROOM 28 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9579	TRAINING/CLASSROOM 29 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9580	TRAINING/CLASSROOM 30 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9581	TRAINING/CLASSROOM 31 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9582	TRAINING/CLASSROOM 32 SEAT	G.07	A8A	38A	04A0A	*****	FV*	T
9583	TRAINING/CLASSROOM 33 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9584	TRAINING/CLASSROOM 34 SEAT	G.07	A8A	38A	04A0A	*****	FV*	T
9585	TRAINING/CLASSROOM 35 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9586	TRAINING/CLASSROOM 36 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9587	TRAINING/CLASSROOM 37 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9588	TRAINING/CLASSROOM 38 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9589	TRAINING/CLASSROOM 39 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9590	TRAINING/CLASSROOM 40 SEAT	G.07	A8A	3BA	04A0A	*****	FV*	T
9901	WAITING ROOM 01 SEATS	NONE	H8A	***	04A0A	*****	C**	*
9902	WAITING ROOM 02 SEATS	NONE	H8A	***	04A0A	*****	C**	*
9903	WAITING ROOM 03 SEATS	NONE	H8A	***	04A0A	*****	C**	*
9904	WAITING ROOM 04 SEATS	NONE	H8A	***	04A0A	*****	C**	*
9905	WAITING ROOM 05 SEATS	NONE	H8A	***	04A0A	*****	C**	*
9906	WAITING ROOM 06 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9907	WAITING ROOM 07 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9908	WAITING ROOM 08 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9909	WAITING ROOM 09 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9910	WAITING ROOM 10 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9911	WAITING ROOM 11 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9912	WAITING ROOM 12 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9913	WAITING ROOM 13 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9914	WAITING ROOM 14 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9915	WAITING ROOM 15 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9916	WAITING ROOM 16 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9917	WAITING ROOM 17 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9918	WAITING ROOM 18 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9919	WAITING ROOM 19 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9920	WAITING ROOM 20 SEATS	NONE	H8A	***	04A0A	*****	C**	A
9921	WAITING ROOM 21 SEATS	NONE	H8E	***	04A0A	*****	C**	A

BSU	ROOM NAME			PLATE	ARCH	DR	MECH	GAS	ELEC	
9922	WAITING ROOM	22	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9923	WAITING ROOM	23	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9924	WAITING ROOM	24	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9925	WAITING ROOM	25	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9926	WAITING ROOM	26	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9927	WAITING ROOM	27	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9928	WAITING ROOM	28	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9929	WAITING ROOM	29	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9930	WAITING ROOM	30	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9931	WAITING ROOM	31	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9932	WAITING ROOM	32	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9933	WAITING ROOM	33	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9934	WAITING ROOM	34	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9935	WAITING ROOM	35	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9936	WAITING ROOM	36	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9937	WAITING ROOM	37	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9938	WAITING ROOM	38	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9939	WAITING ROOM	39	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9940	WAITING ROOM	40	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9941	WAITING ROOM	41	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9942	WAITING ROOM	42	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9943	WAITING ROOM	43	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9944	WAITING ROOM	44	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9945	WAITING ROOM	45	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9946	WAITING ROOM	46	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9947	WAITING ROOM	47	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9948	WAITING ROOM	48	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9949	WAITING ROOM	49	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9950	WAITING ROOM	50	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9951	WAITING ROOM	51	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9952	WAITING ROOM	52	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9953	WAITING ROOM	53	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9954	WAITING ROOM	54	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9955	WAITING ROOM	55	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9956	WAITING ROOM	56	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9957	WAITING ROOM	57	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9958	WAITING ROOM	58	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9959	WAITING ROOM	59	SEATS	NONE	H8E	***	04A0A	*****	C**	A
9960	WAITING ROOM	60	SEATS	NONE	H8E	***	04A0A	*****	C**	A

REFERENCES

The following publications may be obtained from: National Fire Protection Association (NFPA), Inc., Batterymarch Park, Quincy, MA 02269.

NFPA-10	Portable Extinguishers
NFPA-13	Sprinkler Systems
NFPA-17	Dry Chemical Extinguisher Systems
NFPA-50	Bulk Oxygen Systems and NFPA 56B, Respiratory Therapy
NFPA-54	National Fuel Gas Code
NFPA-58	LP-Gas Storage, Use
NFPA-/O	National Electrical Code
NFPA-72A	Local Protective System
NFPA-72E	Automatic Fire Detectors
NFPA-96	Vapor Removal Cooking Equipment
NFPA-99	Health Care Facilities
NFPA-101	Life Safety Code

The following publications may be obtained from: Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120. Department of Defense activities must use the Military Standard Requisitioning and Issue Procedure (MILSTRIP), using the stock control number obtained from NAVSUP Publication 2002.

NAVFAC DM-1.02	Materials and Building Components
NAVFAC DM-1.03	Architectural Acoustics
NAVFAC DM-1.04	Earth-Sheltered Facilities
NAVFAC DM-1.06	Building Thermal Mass Affects
NAVFAC DM-2.01	Structural Engineering, General Requirements
NAVFAC DM-2.02	Structural Engineering, Loads
NAVFAC DM-2.03	Structural Engineering, Steel Structures

NAVFAC DM-2.04	Structural Engineering, Concrete Structures
NAVFAC DM-2.09	Masonry Structural Design for Buildings
NAVFAC DM-3.01	Mechanical Engineering, Plumbing Systems
NAVFAC DM=3.03	Mechanical Engineering, Heating, Ventilating, Air Conditioning, and Dehumidifying Systems
NAVFAC DM-3.05	Mechanical Engineering, Compressed Air and Vacuum Systems
NAVFAC DM-3.06	Mechanical Engineering, Central Heating Plants
NAVFAC DM-3.08	Mechanical Engineering, Exterior Distribution of Utility Steam, High Temperature Water (HTW), Chilled Water (CHW), Fuel Gas, and Compressed Air
NAVFAC DM-3.10	Mechanical Engineering, Noise and Vibration Control for Mechanical Equipment
NAVFAC DM-3.16	Mechanical Engineering, Thermal Storage Systems
NAVFAC DM-4.01	Electrical Engineering, Preliminary Design Considerations
NAVFAC DM-4.02	Electrical Engineering, Power Distribution Systems
NAVFAC DM-4.03	Electrical Engineering, Switchgear and Relaying
NAVFAC DM-4.04	Electrical Engineering, Electrical Utilization Systems
NAVFAC DM-4.06	Electrical Engineering, Lightning Protection
NAVFAC DM-4.07	Electrical Engineering, Wire Communication and Signal Systems
NAVFAC DM-4.10	Electrical Engineering, Cathodic Protection
NAVFAC P-89	Engineering Weather Data
NAVFAC P-355	Seismic Design for Buildings

Military Handbooks, Military/Federal and NAVFAC Guide Specifications are available to all parties, free of charge, from the Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120; telephone: Autovon (DOD only): 442-3321; Commercial: (215) 697-3321.

MILHDBK-1008	Military Handbook, Fire Protection for Facilities, Engineering, Design and Construction
MIL-STD-285	Attenuation Measurements for Enclosures, Electromagnetic Shielding for Electronic Test Purposes, Method of

The following publications may be obtained from: National Council on Radiation Protection and Measurements Publications, P.O. Box 30175, Washington, DC 20014

NCRP Report 35	Dental X-Ray Protection
NCRP Report 49	Medical X-Ray Protection